

GETTING WELL AND STAYING WELL



BY

JOHN POTTS, M. D.



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GETTING WELL
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GETTING WELL AND STAYING WELL

A BOOK FOR TUBERCULOUS PATIENTS, PUBLIC
HEALTH NURSES, AND DOCTORS

BY
JOHN POTTS, M.D.
FORT WORTH, TEXAS

INTRODUCTION BY
J. B. McKNIGHT, M.D.

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P R E F A C E.

Tuberculosis work is a teaching business. Nearly everything that doctors learn of the disease—its prevention, cause, and cure—must be translated into layman's language for layman's use.

Success or failure in our work should be judged very largely by the answer to the question—What became of the patient? Let us face our results both good and bad; give credit where credit is due; place the blame for failure where it belongs; break down fatalism; and cease defending poor work merely because it is all we know how to do.

In all cases of tuberculosis there is a divided responsibility. This book is written in the hope that it will aid patients, nurses, and doctors in learning where their personal responsibility begins and where it ends. Also, it is hoped that it will furnish answers to many of the numberless questions that come into the minds of patients, their families, and family physicians. The book is not the story of one patient's personal experience, but of many patients, many families, many doctors—the rich and the poor, the educated and the uneducated.

The author is indebted to Dr. J. B. McKnight, Superintendent and Medical Director of the Texas State Tuberculosis Sanatorium, for the Introduction to this volume as well as for helpful suggestions in its preparation.

Fort Worth, Texas
July, 1927

J. P.

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INTRODUCTION

When Doctor Potts asked me to read the copy of this book and write an Introduction to it I gladly accepted the invitation because I have handled in the Texas State Tuberculosis Sanitarium large numbers of tuberculous patients that he has diagnosed and started on the road to recovery. I naturally expected much from him and am not disappointed. While reading the copy I had a mixed feeling of happiness and regret; happiness, because such an excellent book is to be available for the public that needs it, and regret, that it was not written many, many years ago.

Doctor Potts is a good teacher for he knows his subject; he hews to the line; he is not afraid. His chapter on *Suspecting Tuberculosis* is a masterpiece and it should be, for much of the success or failure in our work depends upon an early diagnosis. One sees the influence of MacKenzie and Sargent in the practice and teaching of the author for he accentuates over and over the study of symptoms, the patient's feelings, and the patient's personal history. Because the book is primarily for lay readers the technical details of physical examination are only sug-

gested, but the suggestions on diagnosis are valuable for all physicians who have not had special training and wide experience in the diagnosis of early tuberculosis.

The details of the patient's daily routine are very simple and very practical. The author rides no hobby, has no fads, and in every way appears to advocate nothing that experience has not proved useful. He speaks frankly of the responsibility of both patient and doctor and points out in detail the dangers encountered while traveling along the road to recovery.

The author is a good philosopher, free of exaggeration, and a valiant warrior against ignorance, fatalism, and quackery. He points out many of the faults found in tuberculosis work today but only as a means of teaching what experience has shown to be a better way of dealing with the tuberculosis problem. His observations on the economic welfare of tuberculous patients and their families are largely the result of free clinic experience. He does not side-step this disagreeable phase of tuberculosis work but frankly places the responsibility for much of the poverty caused by tuberculosis definitely upon the medical profession where it belongs.

One could scarcely overestimate the value of this book; physicians in public and private sanatoria could place nothing better in the hands of their patients; general practitioners will find it instructive to themselves and to their patients;

and public health nurses will find their work more pleasant and more useful after reading and rereading this volume several times. I hope that "Getting Well and Staying Well" may have many readers, for one thing I am sure of, patients, nurses and physicians will be greatly benefited by reading it.

J. B. McKNIGHT, M.D.

THE EARLY STAGE OF DISEASE

“We who have had experience in general practice know quite well that the vast majority of patients complain of ill health long before there is any physical sign or signs detectable by mechanical aids. Chief among these symptoms are the feelings of the patients—a consciousness of ill-being produced by some sensations, or the absence of the indefinable sense of well-being, or by the presence of symptoms perceptible only to the unaided senses of the doctor.”

* * *

“The bacteriologist, for instance, has undoubtedly greatly increased our knowledge of the tubercle bacillus, but his work does not help in the discovery of those signs of phthisis (consumption) which reveal the early stages of the disease when the possibility of its recovery is at its best.”

* * *

“I have already referred to the fact that the bulk of the most instructive phenomena produced by disease is incapable of detection by mechanical aids. Many valuable signs are only perceptible to the trained eye or the trained ear or the trained finger. Still more valuable signs are only revealed by the sensations experienced by the patient. To interpret these requires a training that can only be acquired by many years of patient observation, during which the mind is stored by the experience of the past, by methods which are peculiar to medicine.”

—SIR JAMES MACKENZIE, M.D., F.R.S.

Getting Well and Staying Well

CHAPTER I

SUSPECTING TUBERCULOSIS

It frequently happens that a man considers the subject of tuberculosis seriously, for the first time, when the disease is suspected in himself or in a member of his family. Previous to this time he had the usual traditional ideas of the disease. The general appearance of the late-stage consumptive was known to him; he had a fear of the disease and its consequences and he hoped that neither he nor a member of his family would ever be a victim of it. In general, he thought being tuberculous a bad situation for one to be in, and endurable only so long as it was someone else that was enduring it. It had heretofore always been someone else's trouble and he had escaped it. But something has happened to call his attention to it as a personal problem. Either he or somebody else has suspected the disease in himself and he is greatly disturbed.

There come to his mind now a great variety of thoughts and feelings consisting of fears, hopes, and wishes. He reviews his family his-

tory and is pleased if he finds no tuberculosis there; he recalls the appearance of cases he has known and is sure he does not look as they looked; he recalls that sometime *before they died* some of them had hemorrhages, some had night-sweats, all of them coughed more or less violently and produced sputum that was said to contain tuberculosis germs, and all were very much underweight. He is certain that he has not the earmarks of a dying consumptive.

But he has been told that tuberculosis in the adult is usually a chronic disease extending over years of time and that its evidences at the beginning are very different from what they are in its late stages. Of the evidences of beginning tuberculosis he knows nothing. At that stage it is an unknown world to him for the patients he has known are dead or they are chronic invalids. He does not look forward to such experience with pleasure; in fact, he feels that something must be done, if possible, to prevent serious invalidism and death. He decides to look into the matter thoroughly with a physician that knows the disease in its early curable stage in order to determine whether he really is tuberculous or whether he has some other disease that has symptoms and other manifestations similar to those of tuberculosis.

Danger in Delaying.—Deciding to do a thing and actually doing it are not the same thing. One hesitates to face trouble. It is easier and

far more pleasant to believe or try to believe that one is not tuberculous and that one's fears and suspicions are without foundation. Besides, the layman has a ready explanation for every feeling, sign, or symptom found in beginning tuberculosis. He may decide to postpone further study of his condition, hoping that all will be well in a few days or a few weeks, although he has been told that the earlier a diagnosis is made the easier it is to recover from the disease. Doctors that do tuberculosis work sometimes see and diagnose incurable cases, for the first time, that were referred to them as tuberculosis "suspects" by some other doctor, from six months to two years before. Responsibility for failure in most cases of tuberculosis rests on the patient or on a doctor; the patient should be very careful to prevent the responsibility from resting on him. Doctors cannot do miracles with late-stage cases.

Why Know?—Why should the evidences of beginning tuberculosis be a matter of common knowledge to laymen as well as to physicians? The evil result of not knowing is the best answer. Tuberculosis is usually a very insidious disease. It has no sign or symptom in its early stage not found in other very common diseases or conditions that are far more pleasant to have and to think about than tuberculosis. Why should one suspect himself as tuberculous because he has had a slight cough for a month or

more when he can easily call it "bronchitis"? It is because of the ease with which all its evidences can be explained in terms of some other disease that it is so often undiagnosed until too late. Not infrequently one finds patients in a state of hopeless invalidism or even in their last illness *that have had no medical care of any kind*. They are not in that condition because they want to be or because they refused to believe they were tuberculous when told so by a competent physician, but through personal ignorance of the evidences of beginning tuberculosis. The Italians have a slogan that reads: "People don't die because of tuberculosis but because of *ignorance of tuberculosis*."

Sources of Information.—A competent physician can give a layman in a few minutes some useful information that it has taken him years of time and the examination, study, and observation of many thousands of patients to learn. To be taught by a physician is the best way for a layman to learn tuberculosis as far as his own welfare is concerned for if he, through ignorance, learn it by personal experience he will find that his knowledge costs more than he can afford to pay. A tuberculous person should learn everything he can from his medical attendant and by reading, rather than by actual experience.

First Evidences of the Disease.—It will be repeated over and over in this book that the un-

taught layman usually thinks of tuberculosis as it appears in the late-stage case and that he suspects it only when there is some evidence of late-stage disease present. The most commonly recognized evidence of late-stage disease is the patient's appearance, that is, he is said to look like a consumptive. But the first evidence of active tuberculosis is not found in the patient's outward appearance but in his *feelings*. He *feels* tuberculosis, usually, months or years before he looks like a consumptive.

In nearly every case the first evidence of active tuberculosis in the adult is weakness or ease of fatigue. There are very few exceptions to the rule. Tuberculous men and women, carrying on their usual daily duties, notice that they are tired out easily,—are easily fatigued; they have, as they remark, "lost their pep." This condition has been noticed by them from three or four months to several years depending, of course, on the length of time they have been tuberculous.

The next change most commonly found in the feelings of a tuberculous person is in his nervous condition. Very rarely this is noticed before the ease of fatigue. The change is mental rather than physical. The patient is irritable and is angered or annoyed by noises, events, or conditions that he would have hardly noticed before becoming tuberculous. Women, who are tuberculous, are usually more irritable than men and

in addition to being irritable, they are inclined to weep easily and often. Some patients—and even doctors—speak of the change in the nervous system as a “nervous breakdown.” Both men and women can recall with reasonable accuracy the date that the change in the nervous condition took place just as they can recall the date they began to be easily fatigued.

The third common change noticed in the feelings of the tuberculous has to do with his appetite and digestion. This change is not so common as the two previously described although it is found in about one-half the cases. The appetite is periodically poor, the digestion is unsatisfactory, and there is often a dislike for fats, that is, the patient does not relish the fat of steak or ham as he did before becoming tuberculous. Poor appetite and poor digestion lead to loss of weight.

The fourth and last change of feeling in the tuberculous that will be described as useful in suspecting the disease is *pain* or *soreness* in the chest. This also is present in about one-half the cases. To many laymen the “chest” is an area about the size of the out-spread hand immediately under the chin and appears to have neither top nor bottom, breadth nor thickness. They do not understand that what they often call the “back” is the back part of the chest. Chest pain or soreness in the tuberculous is found most frequently between or above the

shoulder blades or in the shoulder. When in the shoulder it is usually called "rheumatism." Patients with moderately advanced or far advanced disease often know the location of sore spots on the chest. They not only tell the doctor that they are tuberculous,—they will, if he asks them, show him the location of some of the diseased areas.

This brief description of the changes in the tuberculous patient's feelings is based on my experience in the examination of thousands of patients. A printed diagnostic form containing questions on these four subjects was used. It is found by a daily use of this form that ease of fatigue, variously expressed in the patient's language, is practically constant in the tuberculous, and that one or more, and frequently all, of the other changes described are present also. A careful study of the patient's feelings is the first as well as the most important thing to consider in suspecting active pulmonary tuberculosis in the early curable stage.

The Patient's Age.—Active tuberculosis may be found in persons of all ages from the newborn baby to the oldest of the old, hence, it must be looked for regardless of age. But there is one age in which it appears to be especially common: that age is between the eighteenth and twenty-eighth years. The disease is not only very common at that age, it is also very dangerous. It would be well if lay people would suspect the

young adult who has been in substandard health three months or more *as being tuberculous*, unless he has been examined and proved otherwise by a physician competent to recognize the disease in its early stages.

A Simple Pleurisy.—A large proportion—probably nine-tenths—of all simple pleurisies are of tuberculous origin. Pleurisies that are a part of pneumonia, scarlet fever, rheumatism, or injury to the chest wall are not included in this group. Autopsies show that tuberculous pleurisies are very common. A simple tuberculous pleurisy is usually not a serious form of the disease, but it is useful as a warning that a serious form may develop later on. From 30 to 40 per cent of patients who suffer from acute pleurisy ultimately develop pulmonary tuberculosis (Hartley). A person who has been in substandard health for three months or more and who has had a simple pleurisy should be examined by a competent physician for tuberculosis. If his health does not return to normal he should be reexamined.

Poor Recovery from Something.—A very common event in the history of the tuberculous is *poor recovery from something*. Among the diseases from which there has been poor recovery, acute respiratory disease comes first. One hears the tuberculous person frequently saying: "I had pneumonia but didn't get over it right." "I had influenza and have not been well since."

“I had the grippe and have had this cough and have been in poor health ever since.” “I had a deep-seated cold that settled on my lungs and I have not been able to throw it off.” “I seem to have frequent colds, and I hardly get over one until I get another one.” “I got a cold three or four months ago that settled in my bronchial tubes.” Very likely some of these pneumonias, influenzas, gripes, and colds of which they speak were acute flare-ups of tuberculosis at the beginning, while in other cases the patients became tuberculous because of lowered resistance caused by the other diseases. The layman, as well as the physician, should remember that poor recovery from acute respiratory disease is very suggestive of active pulmonary tuberculosis.

Poor recovery from measles or whooping-cough in children is suggestive of tuberculosis. The probability of the child's being tuberculous is greatly increased if it has had intimate contact for a month or more with an adult that is an open case of tuberculosis.

Poor recovery from surgical operations appears fairly often in the history of the tuberculous. Many of the histories indicate that the patients were tuberculous when the operations were done and that the surgeon was not aware of the fact. Unless the need is imperative the tuberculous person should not submit to an operation until a rest cure has been taken and the disease has become inactive. When an opera-

tion is absolutely necessary for a tuberculous person, the surgeon would do well to speak frankly to the patient, in the presence of some adult member of the patient's family, relative to the danger involved, in order to avoid the bitter criticism he is almost certain to receive from them if he does not do it.

Poor recovery from childbirth is fairly common in the history of tuberculous women. Most tuberculous women, unless they have far advanced disease, will partially or even entirely recover from it during a pregnancy. But after the baby is born, especially if the mother nurses it, the disease is likely to flare up with marked activity. Poor recovery from childbirth is suggestive of active tuberculosis. It is well for the layman to remember that the age in which tuberculosis is most prevalent, that is, from the eighteenth to the twenty-eighth years, is also the age during which childbirth is most prevalent.

The Patient's Weight.—Frequently a person does not suspect that he is tuberculous because he has normal weight or may even be overweight. The tuberculous persons he has known were underweight,—some of them being greatly emaciated before they died. He knows nothing of the length of time it took the disease to destroy them and that probably a part of them were overweight when the disease first became active. Tuberculosis germs are no respecters of

a person's size. They sometimes flourish in fat persons as well as lean ones. Not infrequently one finds tuberculosis in persons who are overweight and, rarely, in some one that is actually obese. Among my cases is one, a young woman, twenty years of age and sixty-seven inches in height, who weighed 235 pounds when she became tuberculous. When diagnosed she weighed 195 pounds. Asked if she was weak or tired out easily she replied: "Oh, the slightest exertion just plays me out." The disease was spreading rapidly in her.

As a rule tuberculous persons have lost weight when diagnosed. This is so characteristic of the disease that anyone who is losing weight and *feels tuberculous* should not remain in ignorance of the cause very long, unless his fears and wishes overbalance his judgment and keep him from being examined by a competent physician.

No Personal Contact.—One sees tuberculous persons that appear to be surprised at the diagnosis given them because they have had no intimate contact with an advanced case of the disease. They often remark: "I don't know where I could have got it," and give the impression that they think the disease is contagious like measles or scarlet fever. Nearly all grown persons in civilized countries have tuberculosis germs in their bodies that may attack them when their resistance is down. It is thought the resistance is down because of pneumonia, in-

fluenza, grippe, physical or mental overwork, childbirth, continuous loss of sleep, etc. In the adult it is not so much a question of personal contact with an open case as it is of *lowered resistance in the patient*. On the contrary, in the case of newborn babies and small children, the matter of personal contact is of first importance.

Hoarseness.—In a small portion of the tuberculous a change in the voice appears *early*. Usually there is not an entire loss of voice but only a huskiness with periodic hoarseness in the early stage of the disease. This, together with a tickling sensation in the throat that gives rise to a cough, often causes the patient to go direct to the throat specialist. The throat specialist takes a brief history, makes inquiry relative to the patient's feelings, takes the pulse rate and temperature, examines the throat and frequently advises the patient to consult a physician who is competent to diagnose beginning tuberculosis. A person that is hoarse and *feels tuberculous* should lose no time in determining the cause of his trouble.

Cough.—While the subject of cough has already been referred to, it is of such unusual importance and there is so much harm done by a wrong explanation of its cause, that it requires special mention. Lay persons, almost universally in America, explain cough as being due to bronchitis and use the words interchangeably,

although cough is an act and bronchitis is a disease. Cough has many different causes, some of which are not even located in the respiratory tract. It must be remembered also that the bronchial tubes are only a part of the respiratory tract and that disease, either acute or chronic, almost *never* attacks the bronchial tubes alone. From the standpoint of Southwestern experience, *simple acute bronchitis* is a self-limited disease that nature usually heals, with or without treatment, in from three to fourteen days. *Simple chronic bronchitis* in the adult is also a very rare disease in the Southwest. As to the climate of St. Paul and Minneapolis, I quote from Dr. Charles Lyman Green: "The diagnosis of 'chronic bronchitis' and 'winter cough' have diminished, as more exact methods have proved many to be cases of pulmonary tuberculosis, chronic cardiac, or cardiorenal insufficiency, or bronchiectasis."

Laymen and doctors, too, should discontinue the pernicious habit of calling a cough "bronchitis" without knowing its cause. Two outstanding evils appear quite generally in America in suspecting and diagnosing active pulmonary tuberculosis: The first is to call the weakness or ease of fatigue due to the disease, "All run down and needing a tonic"; the second, is to call the cough due to the disease "bronchitis" or "just a little bronchial trouble." Thousands of tuberculous persons, an-

nually pay a frightful penalty because of the continuance of these two evil practices. In the Southwest, cough is often absent and is rarely conspicuous in early tuberculosis. In this climate a person—especially a young adult—who has a cough that has continued for a month and who *feels* tuberculous or has a history suggesting tuberculosis, should consider himself *as tuberculous* until proved otherwise by a competent physician.

Blood Spitting.—One of the most alarming evidences of tuberculosis is a frank hemorrhage from the lungs, but, fortunately, it is more alarming than dangerous. Blood-streaked sputum is fairly common in the histories of far advanced cases. When found in the early cases it is usually thought by the patient to come from the gums or tonsils or “just from the throat.” Tuberculous women are especially prone to have blood-streaked sputum or even frank hemorrhages preceding or during the menstrual period. Sometimes a hemorrhage of this kind is the first warning of active tuberculosis recognized by a woman. All tuberculosis specialists hear occasionally the age-old story of someone who had a bad hemorrhage which was the first evidence the patient had that he was tuberculous. These stories do not stand close inspection, for if the patient would read this chapter carefully, he could see for himself that he

had been tuberculous months or years before the hemorrhage occurred.

To suspect tuberculosis one must think *first* of his feelings. Does he have ease of fatigue, nervousness, digestive disturbance, or pain or soreness in his chest? If he has one or more of the symptoms and in addition to it, blood-spitting, the probability of his being tuberculous is increased, and he should go without delay to a competent physician for thorough examination.

Sputum Production.—What the layman calls “spit” or “spittle” the physician calls *sputum*. Like many other disagreeable subjects it is found to be less disagreeable when the physician’s language is used in its discussion instead of the layman’s.

Sputum, as here referred to, comes from the chest and is usually brought up by coughing, hence, the word “expectorate” which means “to cough up and spit forth.” Sputum is produced both in health and in disease. Its production is influenced by weather, climate, age, sex, habit, mental state, disease in the respiratory tract, and disease outside the respiratory tract. European visitors say of us Americans that we are a nation of spitters.

Late stage consumptives nearly always produce sputum due to the disease. Moderately advanced cases of tuberculosis *may* produce sputum due to the disease. Early cases of tu-

berculosis usually *do not* produce sputum due to the disease. In the Southwest a person that produces sputum, even in very small quantities, throughout the day from April to November, should consider himself tuberculous if his *feelings* or *history* suggest tuberculosis. He should go at once to a physician that is well informed in tuberculosis work for a thorough examination.

Afternoon Fever.—Today it is known by many laymen that afternoon fever is often present in cases of active tuberculosis. Many families keep a fever thermometer in the house and usually someone in the household knows how to read it. To take a temperature correctly the mercury should be shaken down to 97° and the thermometer placed far back under the tongue so that, in the adult, only about an inch of the thermometer is outside the lips when closed. It should remain in the mouth not less than five minutes even though it may be labeled a “one minute” instrument.

The young adult, that is tuberculous, will usually have a temperature slightly above normal at four o'clock in the afternoon, *provided* he has had his usual daily exercise. This rule does not apply to patients resting in bed from any cause, nor does it apply so generally to tuberculous patients over forty years of age. A person that has afternoon fever day after day with *feelings* or a *history* that suggest tuberculosis should

consider himself tuberculous until proved otherwise by a physician qualified to offer an opinion on early tuberculosis. The cause of slight daily fever may be a very difficult problem to solve, for the causes are many and some of them are very obscure. The problem is especially difficult in nervous persons. In the young adult, however, the first thing to consider is active tuberculosis.

When to Suspect Tuberculosis.—The outlook of the tuberculous patient depends very largely upon the earliness of the diagnosis; and the earliness of the diagnosis, when made by a tuberculosis specialist, depends upon someone's suspecting the disease in the patient early. Sometimes the patient suspects the disease in himself; sometimes it is suspected by another layman—another tuberculous patient or someone that has been tuberculous; and sometimes it is suspected by another doctor who does not take the responsibility of making a diagnosis of tuberculosis in the early stage, but sends the patient to a specialist for diagnosis.

The tuberculous should be diagnosed while still carrying on their usual daily duties. This means, then, that they will be diagnosed in a doctor's office. When a patient has so much disease that he is unable to do his work or that he is at home in bed when diagnosed, the outlook is usually not good.

The Layman's Duty.—It is only in very re-

cent years that books on tuberculosis have been written in layman's language so that lay persons could read the subject and understand it easily. Prior to that time their knowledge was limited very largely to the appearance, experiences, outlook, and the generally deplorable condition of advanced cases in hopeless invalidism that usually died of tuberculosis. Not many years ago the tuberculous were diagnosed *to die*; to-day they are diagnosed *to live*. Not many years ago, even the doctors, felt little or no responsibility toward tuberculous persons. Old doctors tell us that in the early years of their professional lives they made the same mistakes, held and taught the same hopeless opinions about tuberculosis, and got the same deplorable results in their work year after year,—and all was done with a perfectly clear conscience! But today the doctor that is well informed on tuberculosis is just as anxious to prevent invalidism and its attendant evils in the tuberculous as he is to prevent them in any other curable disease.

The responsibility for the welfare of the tuberculous is not confined to the physician, in fact, he has very little responsibility compared to that of the patient. The layman, too, must know when to suspect tuberculosis in himself, for very often he has no kind of medical service until the disease is far advanced. It is only during the past few years that our more thoughtful people are having an annual physical examina-

tion made, besides, an annual examination cannot insure freedom from disease even for a single month.

There is only one sure solution of the problem: *the lay people must know how to suspect the disease in themselves.* A few of them know it now as proved by the fact that they do suspect the disease in themselves and go direct to the tuberculosis specialist's office for diagnosis. Others "go the rounds" as they say with incompetent physicians, patent medicines, quacks, charlatans, religious healers, cults of various kinds, and layman's advice until the disease is so far advanced that their friends and neighbors label them "consumptives." They have what doctors call a "neighborhood" diagnosis. The outlook for this kind of patient is bad, for he usually remains a hopeless invalid and finally dies of tuberculosis.

Gross ignorance of tuberculosis on the part of the layman, from this time on, will be inexcusable in most of the cases. The subject is simply and thoroughly described in over a half-dozen books written especially for the lay readers. These books are as easy to read as a popular novel or the daily paper, and the information gained from them is as important as a knowledge of the multiplication table. Any knowledge that can keep a person from invalidism, a useless life, financial hardship for himself or his family, and the other disagreeable conditions

that accompany tuberculosis is worth having. For centuries humanity dealt with tuberculosis with ignorance, fears, wishes, hopes, and fatalism. This was not done willfully; there was no other choice. But knowledge of the subject is accessible today, and there is very little reason why the layman should not get this knowledge *and use it*.

Imaginary Tuberculosis.—It might be thought by someone that has had little or no experience with tuberculosis work that reading books on tuberculosis would cause normal persons, or persons having substandard health from some other cause, to have an incurable or annoying case of “imaginary tuberculosis”; but experience shows that this does not occur. Quite the opposite occurs. It is difficult for the tuberculous to take their trouble seriously enough to carry out their medical attendant’s instruction in order to get well and stay well.

There are men and women who apparently revel in having some kind of disease either real or imaginary. They are seemingly not happy without a disease to talk about. Doctors call these patients “neurasthenics” or “psychopaths”; their relatives and acquaintances who are forced to listen over and over to the recital of the stories about their numerous aches, pains, and sensations call them “nuts” or “pests.” Many of these garrulous neurasthenics are born with defective nervous systems and are said to

come "from nervous stock." They are often finger nail chewers and have other less conspicuous evidences of bad inheritance and abnormal physiology that are rightfully known only by physicians. I have seen only one of these unfortunate persons that had imaginary tuberculosis.

Persons that take on an imaginary disease usually select one they can talk about publicly. Should they imagine they had tuberculosis their friends would shun them and thus deprive them of one of their greatest pleasures, namely, describing in great detail their imaginary ills. For this reason such persons find it more useful to have "nervousness," "heart disease," "stomach trouble," or a periodic abdominal operation as long as there is anything left in the abdomen or pelvis to operate for. One need have no fear of a tuberculosis "suspect" that has a normal healthy mind and *that does not have tuberculosis* being continuously depressed or worried after he has been examined by a competent physician and told that he is not tuberculous. On the other hand, a tuberculous person that suspects the disease in himself but is told by a physician that he is *not* tuberculous, will often continue a bitter criticism of the doctor that examined *him* and failed to recognize the disease. He was a better guesser than his doctor; his imaginary tuberculosis proved to be the real thing.

CHAPTER II

THE DIAGNOSIS

There are very few diseases that are more easily diagnosed than late-stage tuberculosis; and there are very few diseases in which the outlook is so unfavorable as that of late-stage tuberculosis. In the diagnosis and subsequent outlook of the disease one may lay it down as a general rule that: The easier the diagnosis, the poorer the outlook; the more difficult the diagnosis, the better the outlook. A person that is readily recognized as tuberculous by his family, friends, and acquaintances is very likely to carry the unfavorable recognition to the end of his days. On the other hand, a person diagnosed as tuberculous *at the right time*, that is, when the outlook is the most favorable, would be recognized as tuberculous by very few lay persons.

A lay person or a doctor that is thoroughly familiar with the information in the first chapter of this book and that *uses* the information, will not often fail to suspect active tuberculosis at its onset. Let it be said at once, though, that *suspecting* the disease and *diagnosing* the disease are not the same thing, for many persons

suspected as being tuberculous are found by careful and thorough examination to be free of the disease. Suspecting the disease is only a guess; diagnosing the disease is proving the guess right or wrong. When tuberculosis is suspected in a person he should go without delay to a competent physician for diagnosis. It should be the desire of the patient to know the facts, pleasant or unpleasant, relative to his condition.

The Doctor.—A few centuries ago very little was known of disease and it was quite easy for one man to have a general—a working—knowledge of all medical learning. But with the passing of time medical knowledge has increased to such an extent that one mind can cover only a small part of it. At this time doctors are said to *limit* their work, and one finds it true of almost all of them regardless of whether they are known as *specialists* or not.

Doctors have very distinct likes and dislikes in what they do. There are certain diseases and conditions they do not like to deal with and others they do like to deal with. They take more interest in certain diseases and work than in others, and they are usually more successful with the work in which they take the greatest interest. A person that is suspected as being tuberculous should, if possible, consult a physician that is known to be a tuberculosis doctor just as he would consult an eye, ear, nose, and

throat doctor to have his tonsils removed or to have his eyes tested.

One cannot be too careful in selecting the doctor that is to examine him in order to determine whether he is or is not tuberculous. The patient should know that one of the greatest events of his life may take place at the close of the examination, and he should get the best medical service available for the examination. To be diagnosed as tuberculous is cause for grief; to be tuberculous and have the doctor fail to discover it needs no detailed comment for it is an event deplored by thousands of persons every year; to be diagnosed as tuberculous when one *is not*, may delay the right diagnosis and treatment, cause economic hardship on the patient and his family, and cause unnecessary worry until the error in diagnosis is corrected.

It is an excellent practice, insisted upon by many tuberculosis specialists that, when convenient, the patient's personal medical attendant be present during the examination so that he may see, hear, and know in detail the reasons for the specialist's final opinion and the instruction he gives the patient if found tuberculous.

The Hour.—Unless a reliable temperature record has been made on the patient it is well that the examination be made between two and six o'clock in the afternoon. A person having active pulmonary tuberculosis, unless a full-time rest patient, is likely to have a slight rise of

temperature in the afternoon; this is especially true of the young adult though not so true of persons over forty years of age. The doctor wants and needs all the information he can get and, a knowledge of the patient's temperature and pulse rate in the afternoon is of use to him.

The Time.—The examination of a person suspected as being tuberculous may prove to be one of the most serious events in his life, up to that date; in fact, it is so serious that many persons refuse to be examined until the disease is far advanced in them. The time involved in taking the patient's history and making the physical examination is usually more than one hour. It takes longer to examine a chest than it does to do an operation for appendicitis; it requires more skill on the part of the doctor, and the results are more to be feared. The doctor must determine whether the patient is or is not tuberculous and, in addition to that, he must determine the existence of any other disease present. Many tuberculous persons, after having spent ten or fifteen minutes in a doctor's office, have gone out with a prescription for a so-called "tonic" or a cough syrup, *and with the tuberculosis still undiagnosed.* Time, alone, spent on a patient is not a thing of value, for one sees persons that have been tuberculous for months, and very often for years, yet the disease has remained undiscovered by their medical attendants. But speed, superficial examinations, and

a large quantity of "professional assurance" cannot take the place of ability, wide experience and careful work.

The Place.—Nearly all examinations for persons living in cities should be made in a doctor's office. As a rule, patients that are physically unable to go to a doctor's office should have been diagnosed months or years before and the outlook for them is therefore not good. The doctor must have a quiet office or, if located in a noisy street, must have a small room built so as to exclude the street noise. It often happens that the less a doctor knows of tuberculosis the more he must depend on what he hears in examining the patient; and the more he depends on what he hears, the more unsuitable are his office arrangements for hearing anything useful. Chest examinations cannot be made effectively in noisy surroundings.

Diagnostic Forms.—All chest examinations should be made with and recorded on diagnostic forms. This is necessary in order to insure thoroughness, for doctors often fail to make the right diagnosis—not because they do not know, but because they do not *use* what they know. The original diagnostic form is often of use for purposes of comparison many years after it was made. No doctor whose examinations run into the thousands can even remember the names of his patients, much less the details of their condition when examined. Careless, superficial ex-

aminations of undiagnosed tuberculous persons, in which no written record was made, have brought untold sorrow, misery, and poverty to large numbers of lay persons and not a little professional embarrassment to physicians.

The History.—The doctor will begin the examination by writing on a diagnostic form the patient's name, age, address, occupation, height, present weight, best weight and the least weight during the past two or three years, and recent loss or gain in weight, if any. He will then proceed to ask questions relative to the diseases, serious injuries, childbirths, surgical operations, and undiagnosed periods of ill health the patient may have had and will record the dates and *type of recovery from them* on the diagnostic form. He will ask with much detail about the patient's *feelings*—ease of fatigue, nervousness, indigestion or poor appetite, and pain or soreness in the chest. He will write on the diagnostic form *the length of time* the patient has had any or all of these abnormal feelings. The information sought in taking the history is given with considerable detail in the previous chapter.

Baring the Chest.—All clothing should be removed to the waistline. The chest must be bare. Women and even little girls over six years of age should wear an examining cape. A suggestion is offered the doctor or nurse reader that a very satisfactory cape can be made by pinning two face towels together *on the side* with safety

pins. The pins should be about sixteen or eighteen inches apart. In this way one towel hangs *across* the front of the chest, the other hangs *across* the back; the space between the pins surrounds the neck. The part of the chest in which the doctor is most likely to find evidence of beginning disease is the area between and above the shoulder blades. It is so frequently found in this area that the French speak of a certain point just above the shoulder blade about two or three inches from the vertebra as the "zone of alarm." Chest examinations are in no way immodest for women and older girls.

The First Step.—After the patient has been prepared for examination, but before the examination of the chest is begun, it is well to take the temperature, pulse rate, blood pressure, and respiration rate. In taking the temperature the thermometer should be placed far back under the tongue,—in the adult only about one inch of it is outside the closed lips,—and should remain in the mouth five minutes regardless of the fact that it may be marked a "one minute" instrument. The pulse and respiration rates may be determined during the time the thermometer is in the patient's mouth. After removing the thermometer the blood pressure is taken and, with the temperature, pulse, and respiration rates, is recorded on the diagnostic form.

Seeing Evidences of Disease.—The doctor *looks* at the patient carefully. "Inspection" he calls

it in technical language. He looks for pallor of body, face, and inner side of the lips; he looks for a single flushed cheek or a single flushed ear in early cases; he looks for uneven pupils. In the neck he looks for a muscle that stands out too plainly or a depression or wasted place or, perhaps, he will find both in the same patient. In the chest he looks for diminished expansion of the whole or part of it; he looks for wasted or hollow places, usually over the tops of the shoulders, between the shoulder blades, or at the clavicles; he looks for prominent bones, usually the clavicles or shoulder blades. The skillful chest diagnostician literally *sees* evidence of tuberculosis, past and present, and he must omit nothing that will aid him in making an accurate diagnosis. What he sees he writes on the diagnostic form to be used with other information in arriving at a final conclusion.

Feeling Evidences of Disease.—The doctor *feels* of the patient carefully. “Palpation” he calls it in speaking to another doctor. A doctor that has put his hands on many thousands of chests has a highly trained sense of touch. His skill appears almost uncanny to lay persons and doctors that do little or no chest work. He feels the patient’s neck to determine whether some muscles are rigid and in spasm; to determine whether the glands above the clavicles and in the neck are enlarged. He feels the upper part of the chest for rigid muscles, abnormal, wasted

places, which are flat or hollowed out. He feels for points of tenderness, most marked above the shoulder blades; he feels the vibration of the voice. What the doctor feels with his fingers is of great importance. He writes on the diagnostic form what his fingers have detected that is useful in making a diagnosis.

Tapping for Change of Sound.—In a quiet room, as nearly free of noise as possible, the doctor taps over the chest to determine how it sounds. He calls the tapping “Percussion.” It is the same principle that we used as boys when we selected watermelons at night—dark nights were safer than moonlit nights. The doctor with extensive experience knows how the normal chest should sound when tapped, therefore, he knows the abnormal sounds that come from a diseased chest. He gets valuable information from tapping the chest and writes on the diagnostic form the results of his tapping.

Hearing Evidence of Disease.—Lastly, the doctor takes his stethoscope and listens to the breath sounds; he calls it “Auscultation.” He asks the patient to breathe in a certain way or to breathe and cough as instructed in order to bring out any abnormalities that may be present. What he hears is of great importance to him. He knows the normal sounds that should be heard and he can detect easily any change from the normal. Again he writes the result of

this part of the examination on the diagnostic form.

Other Tests.—The doctor will make other tests if he thinks it necessary. If the patient is producing sputum he will ask for a morning specimen for examination. He does not want to find tuberculosis germs in the sputum, but if they are present he wants to know it, and he wants the patient to know it, for sanitary reasons. He may ask the patient to have an x-ray plate of the chest made, although this is not often necessary, if he is very skillful in diagnosing this disease.

All the things a doctor would do in examining the chest are not mentioned in the preceding pages, but it may be said that everything mentioned should be done. What is to be done in addition to this will depend on the doctor's skill, his equipment of diagnostic "tricks," and the needs of the individual case. In general it may be said the doctor is looking for *as many* different evidences of the disease as he can find. There are no *foolproof* rules in diagnosing *beginning* tuberculosis. The foolproof rules apply to late stage cases. Well-informed patients always regret their having foolproof evidences of tuberculosis such as night-sweats, hemorrhages, germs in the sputum, and great loss of weight. A skillful tuberculosis doctor makes the diagnosis with the numerous evidences of beginning tuberculosis *that he finds* in the patient—not

with the foolproof evidences of late-stage disease that he *does not find*.

Other Diseases.—The doctor will not feel that his duty is done in merely determining whether the patient is or is not tuberculous. If tuberculous, he wants to know whether other disease is present also; if not tuberculous, he wants to know the cause of the patient's ill health. He is not satisfied, nor should the patient be, to say the patient is "just a little run down and needs a tonic." "has a little bronchial trouble." "indigestion," or "has not got over the flu yet." The patient can get that kind of diagnosis from his grandmother, his barber, or a drug store clerk that wants to sell him some patent medicine.

The Diagnostic Triad.—Nearly all late-stage cases, probably a fifth of moderately advanced cases, and very few early cases of active pulmonary tuberculosis have germs in the sputum. Patients with germs in the sputum may be diagnosed without seeing a doctor, that is, they can send samples of the sputum direct to a laboratory for examination. But as stated elsewhere, no intelligent person wants to be diagnosed as tuberculous by a sputum test if he can avoid it. He wants to be diagnosed and remain a *closed case* until recovery takes place. In order to do this the doctor that makes the diagnosis must have sufficient knowledge of the disease and sufficient detail in his diagnostic form, to be able to

outline a plain, accurate picture—what doctors call a “clinical picture”—of beginning tuberculosis.

The picture of beginning tuberculosis is a *triad*, that is, there are three parts to it. The doctor will get much detail in answer to three major questions:

1. Does this patient have one or more of the abnormal *feelings* usually found in the tuberculous? (See pp. 21, 22, and 23.)

2. Does this patient have a history of bad or substandard health usually found in the tuberculous? (See pp. 23 to 32.)

3. Does the physical examination indicate tuberculosis?

It looks easy, on paper, to diagnose a case of beginning tuberculosis. Like many other things requiring skill, it is easy, usually, *when one knows how*. But one cannot be *told* how to diagnose beginning tuberculosis any more than one can be *told* how to play one of Liszt’s rhapsodies on the piano. The path of experience must be duly trod (Riviere.)

Errors in Diagnosis.—All doctors, regardless of their skill, are sometimes in error; no one is infallible. But it is the duty of the doctor to be so thorough that he will reduce the chance of error to the minimum. A skillful tuberculosis specialist’s *affirmative* diagnosis should seldom be wrong that is, if the doctor says the patient *is* tuberculous there is little chance of error. On

the other hand, if the doctor says with finality that the patient *is not* tuberculous there is a much greater chance of error, and in time, as the disease develops more, he or some other doctor may prove that his first diagnosis was wrong.

Errors on the part of skillful, thorough doctors are usually the result of three things:

1. The disease is not far enough advanced to find by physical examination although the patient *feels* tuberculous and his history suggests it.

2. The disease area is centrally located in the chest or is pleuritic and cannot be found by examination.

3. The patient has some other disease at the time that overshadows the tuberculosis.

A thorough, skillful doctor finding in a person a few evidences of tuberculosis, yet not enough to complete the diagnosis, can only explain to the patient the evidences found and suggest reexamination and continued observation. It is a case of the Scotch verdict—*not proven*.

If persons having this disease were as eager to have a competent doctor diagnose them as tuberculous as they are to have an incompetent doctor tell them that they are not tuberculous, they would be far better off. Many persons do not like to seek serious trouble; they prefer to ignore it as long as possible. They, and those

that feed, shelter, and clothe them, ultimately pay the penalty.

Cheap Advice.—McLean has said: "Cheap advice which leads to delayed diagnosis and mistakes in treatment proves in the end to be very dear." This statement is confirmed yearly by the experience of thousands of tuberculous patients. All of us have a few foolish ideas and inconsistencies about spending money. We are lavish spenders on luxuries but regret the cost of postage stamps. We pay a lawyer fifty dollars for a legal opinion on a business matter of small importance but expect our medical attendant to render a service of far greater value for two or three dollars,—and then neglect to pay the bill. We pay a mechanic twenty-five dollars to overhaul a motor car but expect to get our physical, mental, and sometimes our moral ills overhauled and set right by boldly seeking *free advice*, in season and out of season, from any physician that will listen to our personal and family troubles.

Poor medical service does not stand close inspection and both patients and doctors are found blamable. Medical shoppers are often bill beaters, and bargain hunters are as well known in doctors' offices as at department stores; they get very little of value from incompetent doctors and the doctors get little of value from them. David Harum said of some useless professional advice that he got, "It didn't cost nuthin', and

'twas wuth it." This applies often to medical advice.

There is much difference in the seriousness of medical problems. All grown persons of normal intelligence know by hearsay the seriousness of tuberculosis. Why they continue to try to get something for nothing must be answered by the individual person. One thinks of the warning found in Saint Matthew's Gospel: "If the blind lead the blind, both shall fall into the ditch." But the sensible, informed man puts the question to both patient and doctor—*Why be blind?*

Telling the Patient He Is Tuberculous.—The evidences of tuberculosis ought to be so generally known that a patient would be little surprised to be told that he is tuberculous. At this time many of the patients diagnosed by tuberculosis specialists have suspected the disease in themselves and have passed through the emotional state that the diagnosis would have caused them, had they not suspected it previously. Other patients appear to be entirely ignorant of the disease; they do not understand why the family physician has sent them to a tuberculosis doctor; they don't know Who's Who in medicine; they cannot or will not read a sign on a doctor's office door; the examination is a hazy mystery to them; and when told they are tuberculous it appears to be the first time they have given thought to the subject as a personal problem.

The reaction of the patient to the doctor's

announcement that he is tuberculous will depend largely on whether the patient has suspected the disease in himself or not. If he has, he may express pleasure in knowing the cause of his ill health for he feels that he can fight a known enemy better than he can fight one that is unknown to him. The patient to whom the diagnosis is a complete surprise will usually have an emotional upset for a day or two, at the end of which time, he will probably have reached one or the other of two conclusions: First, *that he is not tuberculous*. In his opinion the doctor that made the diagnosis may or may not be a nice man, a good man, a scholarly man, an angel, devil, or demigod, but one thing is sure,—he's wrong, dead wrong, in his diagnosis. For the time being, the subject is closed with the patient. Second, the patient will have an emotional upset, think himself clear in a day or two, and decide to make the best of what at first appeared to be a bad situation.

Regardless of what the patient will do about it or his emotional reaction, **the doctor should tell him**—preferably in the presence of some adult member of the patient's family—that he is tuberculous. Almost daily tuberculosis specialists hear from tuberculous persons the most severe denunciation of doctors. One complaint is that the doctors did not know the patients were tuberculous until the disease was far advanced; this complaint is usually true. The

second complaint is that the doctors knew the patients were tuberculous but would not tell them. In detail the second complaint runs somewhat like this: "He knew I had tuberculosis, but he just strung me along to get my money; he gave me tonics, cough syrups, shots in the arm, and finally he operated on me. Now I'm worse off than I was years ago."

There is only one safe rule for both patient and doctor to follow: Diagnose the disease in the early curable stage and then tell the patient that he *is* tuberculous. If this is done the responsibility is definitely placed where it belongs, the patient has a good chance to regain normal or almost normal health and usefulness, *and the doctor has a clear conscience!*

CHAPTER III

ACCEPTING THE DIAGNOSIS

Being diagnosed as tuberculous the first time is a very serious matter and is often the cause of an outburst of emotion, some very intense thinking, and a sleepless night. One reviews his past, deplores the present, and speculates on his future. His mind goes over and over the new problem seeking a solution. He is like a wild bird, newly imprisoned in a cage, flapping its wings against the bars seeking a way to escape. Each person so diagnosed has a different problem to solve, for much depends on the amount of disease he has, his age, his ambition, his life-plans, and his responsibilities.

Advanced Cases.—The average layman is not aware of the fact that even at this time, not a few tuberculous persons remain undiagnosed until they are on their deathbeds only a few weeks, and in a few cases, only a few days from death. These patients have no difficulty in accepting the diagnosis and are often not even told they are tuberculous. The problem with them is largely one of sanitation. Other late-stage cases are in their last illness when diag-

nosed but are not bedridden. They usually have no difficulty in accepting the diagnosis for their physical condition is so wretched, and the well-known evidences of consumption so apparent in them, there is little left to question or doubt.

Not only the patient is convinced that the doctor's diagnosis is right but the family, friends, relatives, and neighbors are also of the same mind. The vote is practically unanimous; the diagnosis is settled; recovery is hopeless; and death from tuberculosis is almost certain. This is the type of case that has caused fear, fatalism, and fallacy to dominate the mind of mankind down through the ages. It is the usual ending of cases where everyone, both doctors and laymen, can make the right diagnosis. The advanced case is easy to diagnose, the diagnosis is readily accepted by the patient and all who know him, and hopeless invalidism and death from tuberculosis are likely to follow. The unreasonable feature of this situation is that many persons will not believe they are tuberculous until everyone can see it; they are unable to learn from others' experience.

The Moderately-Advanced Case.—Doctors are not agreed as to what constitutes a moderately-advanced case of tuberculosis, hence, it would be unprofitable to try to teach the lay reader the details of what is meant by this classification. It is enough to say the moderately-advanced case has not as much evidence of

disease as the late-stage case, but has more evidence of disease than the early case. Nearly all persons can readily recognize a late-stage case of tuberculosis when diagnosed by a doctor merely by the patient's appearance. But this is not true of the moderately-advanced case for appearances are very deceiving in this stage of the disease. Very often one sees persons in whom the disease is moderately-advanced that have good color and normal weight or, more rarely, are overweight. In this stage the patient is likely to have afternoon fever when diagnosed, slight cough, and probably one out of five will have germs in the sputum. As a rule the patient will have lost weight during the year preceding the diagnosis. It must be borne in mind that the tuberculous often gain and lose weight, periodically, before they are diagnosed. They speak of the ups-and-downs of their weight as they do of their feelings and general health. The moderately-advanced case has usually *felt* tuberculous from six months to six years before being diagnosed. It may be repeated that the tuberculous feel the disease before the doctor can locate it in the chest by physical examination. The changes in the feelings of the tuberculous person most commonly found are ease of fatigue, nervousness or irritability, periodic poor appetite or indigestion, and pain or soreness in the chest. Ease of fatigue or weakness is the most common symptom of active tuberculosis

and one or more of the other changes noted will be found, also, in moderately-advanced cases.

Anyone that has read the preceding chapters in this book, and is controlled by reason, should have no trouble in accepting his medical attendant's diagnosis of moderately-advanced, active tuberculosis. But if the patient does not want to believe he is tuberculous when diagnosed at this stage of the disease, he can ignore the doctor's opinion and await future developments. If nature heals the disease without any special care on his part, he will continue to deny the diagnosis; if nature does not heal the disease, the coming months or years will show him the doctor's diagnosis was right. The patient will learn by actual experience, but he cannot escape paying the penalty. He will very likely be one more consumptive going about supported by family, friends, or taxpayers, giving as the explanation for his unhappy condition the oft-heard excuses: "I didn't believe I had *it*," or "Some said I had it and some said I didn't, and I didn't know which to believe."

The penalty for not accepting the diagnosis and trying to get well is not paid by the patient alone. From the standpoint of money and earning capacity very few persons can afford to have active tuberculosis; sooner or later the expenses must be borne by the relatives or taxpayers. In cases where the patients die of tuberculosis,—this is true in a very high percentage,—

probably four out of every five are more or less dependent on somebody else at death.

When one is diagnosed as tuberculous in the moderately-advanced stage he should not be controlled by sentiment, wishes, fears, ignorance, and the opinions of his advice-giving friends. The experience is far from pleasant for a patient with good judgment, good medical service from the beginning, and sufficient means to carry him through to a satisfactory conclusion. Without good judgment the future is likely to grow progressively dark, regardless of the amount of money one has or the quality of his medical service.

The Early Case.—The incipient or early case is the most difficult for the patient to understand because it has very little evidence of tuberculosis that he is familiar with. The average layman, if asked to describe a tuberculous person, will nearly always describe an advanced case—a consumptive. If asked what became of the tuberculous persons he has known that conformed to his description of the disease, he will say that he does not know, that the patient is an invalid, or that the patient died of tuberculosis. This, however, does not prevent his passing judgment on what is or what is not incipient or beginning tuberculosis. Consistency is not a part of his argument.

To do good tuberculosis work the doctor must

diagnose the patient early and help him to return to normal, or practically normal, useful life, for tuberculosis work must be judged *by the results obtained*. All our teaching and practice relative to prevention of the disease, and the diagnosis and treatment of tuberculous patients, must be checked up by the final condition of the patients. If we produce nothing but invalidism, poverty, and death, and refuse to face the facts, our theories are worse than useless, they are positively harmful, and we need a good, thorough, mental housecleaning. The rule applies both to patients and to doctors. It is the refusal of doctors to look squarely at their results that causes them to do poor work year after year. Laymen and doctors, too, should think, talk, teach, plan, and study ways and means, to rid the public of the bad results we are getting. Each case should be studied, and responsibility for failure or success should be definitely known and definitely placed.

Tuberculosis doctors see patients in all stages of the disease and with all grades of knowledge of the subject. We hear frequently the same explanation from advanced cases: "I didn't believe I had it" and "I didn't know it in time." Not knowing one is tuberculous *in time* is often the fault of a doctor; not believing he is tuberculous after the doctor has told him he has the disease is the fault of the patient. Tuberculous patients and their families are very bitter in

their criticism of doctors that could not or would not have them diagnosed in the early stage.

It is interesting to note, also, that one finds a few advanced cases that frankly admit they were diagnosed in time to have made a good recovery, but would not believe the doctor's diagnosis. Such frankness is very commendable, for most of us are prone to blame somebody else for our failures in life. Also, doctors that do tuberculosis work diagnose moderately-advanced, and even advanced cases on their deathbeds, who voluntarily state that they were told by a doctor months or years before to have a chest examination made by a specialist, but they postponed it from time to time until they became late-stage cases.

Many doctors do not take the responsibility of diagnosing early tuberculosis but are very alert about suspecting it. Their judgment is usually good, not only in suspecting the disease, but also in trying to get the patient on the right road to an accurate diagnosis and, if found tuberculous, to a rest cure and recovery.

Responsibility for Failure.—Three persons are brought up for judgment in case of failure to accept a diagnosis made in the early stage of the disease. These persons are the patient, an advice-giving relative or friend, and the doctor that makes the diagnosis.

Failure on the part of the patient to accept the diagnosis comes from ignorance, fear, a lack

of forethought, and the gambling spirit. It is necessary to repeat over and over in a book of this kind that lay persons usually think of tuberculosis as it appears in an advanced case. An early case does not have evidences of the disease in the same amount that he will have when the disease is advanced. It is about like comparing a pimple to a carbuncle. A carbuncle has everything a pimple has, but it has about a hundred times as much of it. One can have a pimple on the back of his neck and for a day or two scarcely be conscious of it; but if it develops into a carbuncle, not only the patient but the whole household, even the neighbors, know about it. No one but the patient knows when he first becomes tuberculous. He feels it—*feels tuberculous*; that is the first evidence of the disease. As the months and years pass by other evidences of the disease will appear, if nature does not heal the disease spontaneously, so that the patient's family, friends, and neighbors will be able to see at a glance that he is tuberculous.

Nearly all cases of pulmonary tuberculosis in the adult have a curable stage. A physician that is skillful in diagnosing the disease can detect it accurately in the curable stage. But the patient must know that when he is in the curable stage his friends and neighbors cannot tell at a glance that he is tuberculous; when that time comes, it is too late to get the best results from a rest cure.

Fear of the disease and its consequences is an important factor in causing the patient to reject the diagnosis. There come to his mind recollections of cases he has seen and the gloomy tales he has heard from old persons about "the horrors of consumption." The wish is often father to the thought and from the intense wish that he were not tuberculous, comes the thought that he *is not*, and he rejects the diagnosis at the most opportune time to recover.

A lack of forethought is another cause for refusing to believe that he is tuberculous. The financial side, alone, if thoughtfully considered, should make the patient accept the diagnosis. If he loses his earning capacity and usefulness, what is to become of him? Probably four persons out of every five that die of tuberculosis have insufficient money to meet their expenses during the last year of their lives. The relatives, friends, or the taxpayers, pay the bills. Of these, it is the patient's immediate family that suffers most. One admires their spirit of self-denial; and the hardships cheerfully endured, the pitiful economies practiced, the resourcefulness in the use of their meager funds touch the hearts of those of us that are thought to be hardened to such experiences. Very often these experiences are unnecessary and are due to the patient's not accepting the diagnosis when made in the early stage of the disease.

And yet it is the immediate financial problem

that sometimes keeps the patient from accepting the diagnosis and taking the rest cure. The difficult problem of who is to support the patient, who is to support his family, who is to do his daily work while he lies in bed for months to regain his health, seems at first to have no solution. And while it does not solve the immediate problem to consider one that is more remote and more serious, yet the patient should also consider the matter of who will support his family or do the work, should the disease continue to increase so that he would lose his earning capacity or die of tuberculosis. Briefly, it is a matter of choosing the lesser of two evils, and experience shows that accepting the diagnosis and taking a rest cure is the safer plan to follow.

Someone has said, wittily, that all lay persons like to practice medicine *a little*. To those of us who deal with the tuberculous it appears that some of the laymen do not know when to restrain their desire to practice medicine in serious cases that are quite beyond their knowledge. The seriousness of the case does not enter their minds; the matter of pretending to know more about the patient than his medical attendant knows, does not disturb them; the only thing considered is the glorious opportunity to air an opinion regardless of its consequences. One frequently hears patients say that if they had as much money given them as they have advice they

would be as rich as Croesus. The influence of laymen's advice is frequently bad and one sees a victim of tuberculosis going through the well-known experience of chronic invalidism and poverty because a layman told him he was not tuberculous after his medical attendant had diagnosed his disease in the curable stage.

A layman has as much right to talk about health and disease, provided he keeps within the limits of his knowledge, as a doctor has; but he should know his limitations. There are many well-informed doctors today, men of outstanding ability in certain lines of medical work, who do not offer opinions on tuberculosis other than to suspect it in their patients. They know its difficulties and they know its dangers. One of the greatest living authorities on the subject, Dr. Clive Riviere, of London, tells us: "The skill required for the early diagnosis of tubercle is, unfortunately, difficult and laborious to acquire and no short cut to it does, or even can exist—the path of experience must be duly trod." In view of the fact that large numbers of well-educated physicians will not take the responsibility of making a diagnosis of tuberculosis in the early stage of the disease, or of giving advice relative to the care of the patient, it appears that lay persons would better refrain from giving advice on the subject that is not in accord with that given to the patient by his medical attendant.

The doctor's responsibility in getting the patient to accept a diagnosis made in the early stage of the disease is very simple. His duty is done when he tells the patient in simple language, preferably in the presence of an adult member of the patient's family, that he has active tuberculosis. The doctor is neither a policeman nor a lawyer; it is not a part of his duty to threaten or scare; he should not overestimate or underestimate the patient's condition. The doctor is a teacher. Therefore it would be well, when he has finished the examination, to read from his diagnostic card the results of his examination, and explain to the patient his reasons for the diagnosis. The responsibility is then placed on the patient and his family, where it belongs.

Medical Shopping.—One of the first thoughts that comes into the mind of a tuberculous person diagnosed in the early stage is that the doctor's diagnosis is wrong. The patient is certain that the easiest way out of his trouble is to go to some other doctor to see if he can get a more pleasant diagnosis, and in nearly every case he can—in the early stage of the disease. But getting some other doctor to tell him "he is just a little run down and needs a tonic," "has bronchitis," or "has not recovered from the flu" does not change his condition. It will very likely only get him into more trouble, delay his rest cure, increase his invalidism, and ultimately

give him an opportunity to exercise his power of vituperation, invective, and profanity, in speaking of the doctor or doctors that told him he was not tuberculous.

Voting on a diagnosis is often poor policy and it is usually so when one is trying to avoid serious trouble. The opinion of one doctor that knows tuberculosis in its early stage is more useful than the opinions of a score of doctors that can recognize it only in its late stage. A person that willfully seeks poor medical service to get a diagnosis of early tuberculosis reversed, will get little sympathy from his friends and less, still, from competent doctors. No doctor is so great, so good, or so famous that his diagnoses are always accepted; but for the patient to go from good to bad, and from bad to worse, is a poor way to handle a serious medical problem. One cannot blame a person diagnosed as tuberculous for seeking additional advice on the subject, if he is in doubt; but he should seek it from *competent* sources, for indiscriminate medical shopping, without knowing Who's Who in medicine, is a waste of time and money and often ends in disaster. As stated elsewhere, the evidences of tuberculosis, such as are described in the two previous chapters of this book, ought to be so commonly known that a patient should have little trouble in accepting the diagnosis.

Rejecting the Diagnosis.—Advanced cases have

so much evidence of the disease as it is known by the layman, that only a few of them reject the diagnosis. Moderately-advanced cases have less evidence of the disease, hence, it is easier for them to doubt the diagnosis. Early cases have very little evidence of the disease as it is known by the poorly informed layman, therefore, it is easy for them to reject the diagnosis. The question comes to the mind of every patient diagnosed in the early stage: What will happen to me if I reject the diagnosis and do not take a rest cure? One of four things is likely to happen:

1. Nature *may* heal the disease spontaneously. The patient may get well and may not be tuberculous again or, at least, for several years. Physical examinations, x-ray examinations, and autopsies show that many persons have been tuberculous and have recovered from the disease without having known what was really the matter with them.

2. The patient may reject the diagnosis and go through the usual ups-and-downs of the tuberculous for six months to two or more years, depending on his age, way of living, occupation, etc., until he finally sees the error of his way and goes to bed for a rest cure. He may recover, but it will cost him more in time and money, and he will have more invalidism after he recovers, for he will have had more destruction of lung tissue.

3. The patient may reject the diagnosis, go through the usual ups-and-downs of the tuberculous, that is, get better and worse for a period of six months to several years, and then decide to take a rest cure when he has become an advanced case. He will not recover; he will die of tuberculosis.

4. The patient may reject the diagnosis, get better and worse, periodically, for months or years, and finally die of some other disease or injury.

It will be seen by the details just related that, in accepting the diagnosis and taking a rest cure, one is only trying to avoid trouble. A patient should be governed by reason and common sense, and not by his wishes. The gambling habit is usually bad when the stakes are money; but when one gambles on his health and loses, becomes an invalid, loses his earning capacity and usefulness, and must be supported by his family or the taxpayers, it is a far more serious matter than gambling for money. The time to consider these things is when the diagnosis is made in the early curable stage of the disease.

Facts, Sentiment, and Ignorance.—There is no medical problem in which the disagreeable facts are so well known as that of tuberculosis; none in which there is so much sentiment; and none in which there has been such appalling ignorance. There was, and still is, good reason for calling the disease the Great White Plague.

Even today there are a few doctors and many laymen, that believe tuberculosis is a disease having but a single sickness that always ends in death, and that if a person diagnosed as tuberculous recovers his normal health, he was not tuberculous. Today there are still a few doctors who do not believe in telling a person he is tuberculous, and give as the reason for the belief and practice, that they are afraid of hurting the patient's feelings. Later, when the facts are known by the patient and his family, the doctor receives very bitter criticism. Today there are still a few persons who say they do not want to be told they are tuberculous should the doctor find them so, nor do they want a members of their family told that he is tuberculous, in case the doctor finds active disease in him. They ask the doctor before the examination is made, not to tell the truth to them or about a member of the family; they do not want to know the facts. This is said to be the practice of the ostrich, but no one commends that bird's intelligence.

There are doctors today who do not suspect tuberculosis in a person until he looks like a consumptive, nor can they diagnose it until the disease is so far advanced that the patient has germs in his sputum; also, they do not believe that any other doctor can suspect it and diagnose it earlier. They do not voluntarily tell what becomes of their patients. There are laymen

that want that kind of diagnosis, at least, they do not want to believe they are tuberculous when diagnosed in the early stage, before they look like consumptives and before they have germs in the sputum, and other evidences of late-stage disease are present.

But there has been a great deal of improvement in tuberculosis work during the past twenty-five years. It is quite generally known now, among lay persons as well as among doctors, that tuberculosis in the early stage is a curable disease and that, of the chronic diseases that cause death, it is one of the most easily cured. It is also becoming more generally known, both by doctors and lay persons, that tuberculosis can be accurately diagnosed in the curable stage by doctors that have had sufficient training and experience in tuberculosis work. Doctors and laymen, too, are learning that incipient tuberculosis must be diagnosed by the evidences of incipient disease, and *not* by the evidences of late-stage consumption. Doctors and laymen are learning that the first evidences of tuberculosis are found in the patient's *feelings*; and that if one *feels tuberculous* (See Chapters I and II) a few weeks or as long as three months, he should be examined by a competent doctor in order to learn the facts, both pleasant and unpleasant, relative to his physical condition. Doctors and laymen, too, are learning the importance of suspecting tuberculosis in anyone

that has had poor recovery from any disease, serious injury, or from childbirth. They are also learning that, while active tuberculosis is found at all ages in life, it is especially prevalent in the young adult—the person between eighteen and twenty-eight years of age.

A better knowledge of tuberculosis has greatly increased the feeling of responsibility and the warnings of the conscience in both doctors and lay persons. There was a time when a doctor could overlook tuberculosis in a patient until the disease was far advanced and then, when diagnosed as a late-stage case, tell him to “go out West” to get rid of him. Indeed, the doctor could do this year after year, apparently, with perfectly clear conscience. But the well-informed doctor cannot and will not do such a thing now, for he feels very keenly his responsibility in suspecting the disease early and in taking the necessary steps to have the patient returned to normal, useful life. There was a time, too, when the tuberculous patient went through the various stages of the disease, employed poor medical service, used patent medicines, patronized quackery, followed the advice of his friends, lived as a parasite instead of as a producer, and finally died of tuberculosis, apparently with no thought that it could have been otherwise. To him it was a matter of fate, fatalism,—destiny! Today this thought is not so common and nearly every dying consumptive will recite one or both of the follow-

ing statements: "The doctor didn't know it in time" or "I didn't believe I had it, when the doctor told me." And while these statements are a poor substitute for the use of proper knowledge and good judgment at the right time, they *do* show that he has learned some useful facts, even though he learned them too late.

Progress in the battle against tuberculosis is made at tremendous cost. The greatest problem at this time is not to make new discoveries, but to get the masses of the people to know and to use the information already known by a small minority. Getting well and staying well depends on one's knowing many things. Among the first is to have a diagnosis made early, and then accept it, and take a thorough rest cure.

CHAPTER IV

LEARNING TUBERCULOSIS

The study of tuberculosis is not difficult nor is it disagreeable to a person afflicted with the disease. Most patients are eager to read laymen's books on the subject and to listen attentively to the oral instruction of doctors, for most of them soon learn that their future welfare depends, more or less, on their knowledge of how to get well and how to stay well. Anyone setting off on an unexpected journey may, through necessity, start out in the dark; but he will not go far until he feels the need of light, especially if the road to be traveled is new to him. He soon learns that the more light he has on the road, the more safely he will be able to travel, and the sooner he will arrive at his destination.

The road to recovery from tuberculosis is neither straight nor smooth for most of its travelers. Many pitfalls and rough places, many crossroads and alluring byways are found as one travels along. It is often a difficult journey to make even with an experienced guide; without an experienced guide, failure in some form is likely to befall the patient. As soon as diagnosed, one should begin to learn tuberculosis as

it is taught by the best informed doctors of his day. In many chronic diseases like pulmonary tuberculosis, education of the patient will contribute about as much to his recovery as rest, good food, and fresh air (Lawrason Brown).

Cleaning the Slate.—When many of us were children at school we used slates, and before we began a new task we cleaned off the slate. It would be well if the patient would do the same thing, that is, he should get rid of all he knows, or thinks he knows, about tuberculosis and begin again with a clean slate. From the day of diagnosis, as he travels along the road to recovery, he should take no step that is not approved by a physician competent to advise him on the subject. Whether the physician speaks to him personally, or whether he speaks through the printed page, matters not. If the patient cannot get the information he needs, he would better lie still in bed and do nothing until competent advice is secured.

Young persons can clean off the slate and use only newly acquired information much easier than persons beyond middle life; the latter usually have much difficulty in getting rid of ideas acquired many years before. The well-known adage, "You can't teach an old dog new tricks" is applicable to a very large number of old persons that are expected to learn tuberculosis. It would be well if every person diagnosed as tuberculous would procure, within a week, a

layman's textbook on the subject for his guidance; that is, if he does not enter a good tuberculosis sanatorium at once. It is not an evidence of good judgment to travel a dangerous road in the dark when light is available.

Learning by Experience.—If a tuberculous person, diagnosed in the early stage, lies in bed twenty-four hours the day for a month or two, he will usually notice certain changes in his condition. Among these changes he notes that he feels better; he is less fatigued; his irritability is diminished; the fever, if any, is likely to be lower; the cough, if any, is decreased; the weight may have increased; the appetite is better; the pulse rate is slower; and the soreness or pain in the chest, if any, has decreased. This is valuable knowledge learned by the personal experience of the patient.

But there is another kind of knowledge that he cannot afford to learn by personal experience, for the cost is too great. He can, however, learn it from a book, or by observation of other patients, or from his medical attendant. Among the things he should learn without personal experience are the following: Persons with advanced cases of tuberculosis may have hemorrhage, night-sweats, great loss of weight, violent productive cough, tuberculosis germs in the sputum, persistent fever, bad digestive disturbances, and very distressing financial conditions for themselves and, frequently, for their families.

The less personal experience the patient has with the disease the better off he is. The truly wise patient will let the willfully ignorant and careless ones have all the hemorrhages, night-sweats, germs in the sputum, and poverty they want, but he will avoid learning tuberculosis in that way.

Learning from a Book.—There have been books on tuberculosis, written in simple, layman's language, only a few years and, as a consequence, there are many, many thousands of tuberculous patients, thousands of doctors, and thousands of Public Health nurses, that still do not know there are such books. The ignorance on the part of the patients, doctors, and nurses relative to the usefulness of these books is deplorable. Those of us who use them daily find them indispensable, and we frequently hear intelligent, grateful patients calling down the blessings of High Heaven on Atkinson, Brown, Flick, King, McLean, Pottenger, Webb, and Wittich for having written them. These books are as easy to read as newspapers, as interesting as popular novels, and as necessary to a patient as a Bible is to a parson. They can be read by anyone that can read simple English, and they will be found useful every day, from the time the disease is first suspected, until the patient has fully recovered. They are the best means, and in many cases the only means, of giving intelligent instruction to the patient's family; and it cannot

be mentioned too early or too often, that the patient's conflicts with the ignorance of his family and his friends are very unpleasant, and frequently the direct cause of his failure to recover.

A Patient's Responsibility.—It is the duty of every grown person to know how to avoid trouble. The age-old excuse "I didn't know" is greatly overworked by most of us. Men and women who do not know and apparently do not care fill the free clinics, alms houses, and the charity hospitals. Many of them are without personal or family pride, past or present. Another class, a little higher up in the social scale, avoid charity institutions, and are not generally known to the public as being "on charity"; but they eke out a miserable existence, living from hand to mouth, beating their bills, or, they are parasites that live off their relatives, friends, acquaintances, and the charitably disposed public. Doctors that do tuberculosis work see many persons of this type. Over and over, day after day, we hear their old familiar excuse—"I didn't know."

Let us look at this problem of ignorance with fairness and see if a practical solution of part, or all of it, is possible. Is there any reason why an intelligent person that can read simple English, should not read the first chapter in this book or a similar article by another writer, and learn enough about the evidences of beginning

tuberculosis to suspect it in himself or a member of his family, so as to do his part in getting an early diagnosis? Or, would he rather remain in ignorance, take a chance, and, if tuberculous, remain undiagnosed until the disease is far advanced? After one suspects he is tuberculous but cannot get competent medical service locally, is there any reason why he should not write the superintendent of the state tuberculosis sanatorium or the medical director of a private tuberculosis sanatorium in his state, to learn the name of the nearest doctor that is competent to examine him, and tell him whether he is or is not tuberculous? Or, would he prefer taking a chance again with incompetent medical service or some kind of quackery and, later as a late-stage case, go to a competent physician and expect a miracle to be done for him? Is reliance on one's own poor judgment and the glowing promises of a quack's "treatments" a reasonable substitute for knowing how, when, and where to obtain proper medical service at the right time? How much sympathy does a man deserve when he is in trouble through his own willful ignorance? Faith in doctors is sometimes a good thing, but enough personal knowledge of tuberculosis and Who's Who in medicine to enable one to get on the right track and stay there until complete recovery takes place, is the essential thing.

The responsibility for having this knowledge

and using it rests upon the patient. The best proof of the statement just made is to hear the pitiful complaints of the tuberculous who, because of incompetent medical service or no medical service at all, have not known their true condition until the disease was far advanced. The fact that every year an increasing number of persons, some of whom are tuberculous, go direct to tuberculosis doctors for examination is good evidence that they can learn to suspect tuberculosis, and that they are conscious of their own responsibility. If tuberculous, they want to know it; if not tuberculous, they want to know the cause of their substandard health in order that it may be returned to normal, if possible. Responsibility for failure is a hard thing to face, and giving excuses or passing the buck is easier. But when one looks over the appalling results of laymen's ignorance and professional incompetency, he can scarcely be blamed for turning on the fireworks, beating a drum, or doing anything else that will arouse public and private interest in gaining a more useful knowledge of tuberculosis *at the right time*.

Why Know it Early?—The diagnosis should be made at the earliest time possible and the rest cure begun within a day or two. This is especially true for the young adult. No one can afford to gamble with tuberculosis and the invalidism that results from it. The layman

should know that the disease causes permanent destruction of the lung, and that the scars that result from its healing remain throughout the patient's life. Small cavities may, in time, be closed by scar tissue, but large cavities persist and are the cause of annoying and offensive sputum production and—rarely—of severe hemorrhages. Everyone knows that Nature can heal a pimple easier than she can heal a boil or a carbuncle; everyone should know that Nature can heal a diseased portion of lung tissue the size of one's thumb, easier and more quickly than a portion the size of the hand. Also, it is evident that there will be less scar tissue after recovery.

Gloomy Remarks of Old Persons.—Pulmonary tuberculosis occurs at all ages in life but is largely a disease of the young adult. Many young adults must hear and overhear the gloomy forebodings of their parents, grandparents, and other old persons, for old persons lived at a time when tuberculosis was truly a gloomy subject, and they have not changed their ideas with the passing years. To many of them a diagnosis of tuberculosis meant the patient should grow progressively worse and die of the disease. This was so firmly fixed in their minds that their statements about the outlook of the present-day patient are sometimes depressing if heard by him. On the other hand, if the patient gets well, the old persons are very likely

to say that he did not have tuberculosis at all. Very frequently one hears from elderly persons the question: "Doctor, do you think anybody ever gets over it?" The question, itself, tells very plainly what they think. A patient will do well to get his information on tuberculosis from more modern sources than his grandparents.

The Public's Problem.—The responsibility for the solution of the tuberculosis problem rests largely on the masses of the people—the public—and not on the medical profession. Doctors can furnish information only to persons who want to learn. If people want to remain ignorant of the subject and run the risk of paying a severe penalty because of their ignorance, it is their privilege to do so. On the other hand, those of us who see daily the deplorable effects of tuberculosis and hear over and over the excuse—"I didn't know it" or "I didn't know it in time," are likely to see more clearly, than persons with little or no knowledge of the subject, the necessity of getting information to the masses of the people. It is because we see the importance of teaching the public that tuberculosis organizations are formed, free clinics are held, books on the subject are written in simple, layman's language, lectures are given, and every means available used to spread knowledge of the disease.

A Suggestion.—A great deal of useful information on health and disease can be written in

simple language that can be read and understood by the average pupil in the public and private schools. If a boy can read a lesson in his school reader about "Frank and the Bear," why could he not read a lesson about "Frank and the Mosquito," and in this way learn the cause and prevention of malaria? If he can read a lesson about another boy named Henry who was an orphan, and who helped to support his widowed mother, why could not the lesson contain some simple facts about why Henry's father died of tuberculosis? There appears to be no very good reason why this simple information should not be taught to boys and girls in the public and private schools. Very likely some of the religious fanatics would set up an awful howl and deny the existence of disease, and say they didn't want their children to think of disease—*except as an error in the mortal mind*—but charlatans of that kind should have little influence with the masses of the people. We who do tuberculosis work, know that when the religious fanatics become tuberculous, their families, friends, relatives, the private charities, and the taxpayers must often support them just the same. The people who pay the bills have some rights in the matter as well as the fanatics. The efforts of volunteer health organizations at teaching tuberculosis to school children have some merit, but in no sense can be compared to the good that could be done by having health

work embodied in the regular school readers for the lower grades and, later, as a part of a required course in secondary school work.

Public Health Nurses.—In recent years there has come to the physician's aid a valuable assistant—the public health nurse. The title borne by the nurse may in itself mean nothing, for all public health nurses do not know how to do nurse duty in tuberculosis work, any more than all doctors know how to do tuberculosis work. But a well-educated graduate nurse with good natural qualifications, that has worked one or more years (the more the better) in a tuberculosis clinic, and has visited the patients she has seen there in their homes, has acquired knowledge of great practical value to the community she serves. She is an important factor in teaching tuberculosis to the public, and is worth far more to the taxpayers and volunteer tuberculosis organizations than she is paid in money.

Preventing Tuberculosis.—Learning how to prevent tuberculosis is far more important than the average layman thinks. The principal thought of most persons is to keep away from advanced cases. One hears frequently the question: "Do you think it would hurt me to go around Mike Murphy or Sallie Smith?" (Mike and Sallie are known to have consumption.) There is almost no danger to a grown person in having sensible association with a tuberculous person—even an open case. One

will note that doctors and nurses who deal with all stages of tuberculosis daily, do not become tuberculous. Among grown persons the danger of association is limited largely to those having intimate contact with open cases, such as one has by sleeping in the same bed with a tuberculous person for several weeks or more. This is not the case, however, with newborn babies and small children. It cannot be said too early, too often, or too forcibly that newborn babies and small children should be kept away from open cases of tuberculosis, and kept out of the rooms occupied by open cases.

Babies are born free of tuberculosis. The exceptions to this rule, if there are any, are so infrequent that for practical purposes they may be entirely disregarded. But children born in civilized countries, especially those born in cities, sooner or later begin to pick up a few tuberculosis germs so that, by the time they are grown, nearly all have been infected; that is, they have tuberculosis germs *in very small quantities* lying dormant in the body. This does not mean that they have actual disease, that they *feel* tuberculous, and have evidence of the disease that a doctor can find by physical examination. It does mean, though, that one can and may develop active disease, if the natural resistance of the body is lowered to the extent that the germs, lying dormant in the body, begin to develop and increase to considerable numbers.

To grown persons, then, becoming tuberculous is a matter of *lowered resistance* rather than of association with a tuberculous person. The layman of today will find it necessary to discard two ideas that were held many years ago, namely, that tuberculosis is inherited, and that one must have been intimately associated with a tuberculous person, in order to have active disease. If one knows *why* he might become tuberculous, he is more likely to take the necessary steps to prevent it.

In reading the first chapter of this book one learns that tuberculosis often follows some other disease, injury, surgical operation, childbirth, mental or physical overwork, lack of rest, and—in the Southwest—a long exhausting summer. The disease can be prevented in some of these cases.

Persons having pneumonia, influenza, or grippe can remain in bed until complete recovery takes place instead of getting out and going back to work again, as soon as they are able to walk, as is so often done. Women that have been tuberculous can lie in bed after childbirth until completely recovered. Surgical operations on the tuberculous can be postponed in many cases until the disease is arrested, and very often operations are not needed at all. Children, especially those living in the same home with the tuberculous, can be kept in bed until complete recovery from measles or whooping cough takes

place. Long hours of physical or mental work can be decreased and the hours of rest increased. There are large numbers of persons, both men and women, who apparently do not know enough to go to bed at bedtime. They must work throughout the day to make a living, and appear to think they must dance or play cards most of the night to enjoy living. Tuberculosis is one of the penalties they sometimes pay for this bad practice.

The Time Involved.—Nearly every grown person has known someone that had tuberculosis a long time before he died. But a peculiar mental blindness is observed in the undiagnosed tuberculous person in that he does not appear to see the same condition in himself. Many persons can see that a member of somebody else's family has been tuberculous for years, but cannot see it in their own families. On the other hand, there are still large numbers of persons, especially elderly persons, who think that anyone diagnosed as tuberculous should die within a few months to prove the diagnosis was right. They appear to think the disease began the day the diagnosis was made instead of months—usually years—before.

In the adult under twenty-five years of age, it usually takes the disease about two years to kill its victim, when it does kill. Above the age of twenty-five years, it takes the disease from two to forty years of periodic activity to cause

death. As a rule, the older the patient is, the slower the disease acts.

Tuberculosis in the adult frequently appears as a periodic disease. It spreads and heals alternately. Often without diagnosis or treatment by a physician, nature heals it. Sometimes it is only partially healed and for periods of time there is only low-grade activity. The undiagnosed and untreated person describes himself as having his ups-and-downs. Sometimes the patient says, "I have had my ups-and-downs for years. but am gradually going down." Every well-informed tuberculous person knows with fair accuracy how long he has had the disease, and frequently without emotion or fear, frankly speaks to his medical attendant of *his* having been tuberculous for years; this is especially true of patients over thirty years of age.

Essential Knowledge. — The diagnosis of tuberculosis is easy or difficult, depending on the stage of the disease. Open cases, that is, cases with germs in the sputum, may be diagnosed by one or more sputum tests. But open cases are usually moderately advanced or far advanced, and no sensible person wants to be diagnosed in that stage if he can avoid it. Besides, no well-informed physician in tuberculosis work wants to find open cases, although he does find them frequently. The diagnosis of beginning tuberculosis is very difficult, unless the physician has had extensive experience. Even then, the

most skillful are sometimes in error as shown by time and the subsequent examination of the patient. After one has been diagnosed, it is essential that he follow the instruction of a doctor that knows how to teach tuberculosis, if he is to get the best results obtainable.

Changing and Unchanging Ideas.—Recent years have shown much progress in tuberculosis work. Old ideas that were both untrue and harmful have been discarded and have been replaced by knowledge, fully tested, that is easily learned, easily proved true, and useful to know. The four most important changes of interest to lay readers are:

1. The increased desire for improvement and accuracy of early diagnosis on the part of the physician, and the knowledge of its necessity on the part of both physician and patient.

2. The development of the rest cure so that its use is theoretically known by both physicians and patients.

3. A knowledge of the time involved in the development and progress of the disease in the individual patient.

4. A marked increase on the part of doctors in the feeling of *responsibility* for the welfare of the patient.

Doctors and patients, too, look forward eagerly to the day that investigators in the laboratory will discover or develop a specific

medication for the successful treatment of tuberculosis; something that will cut short the time necessary in the rest treatment is much to be desired. The newspapers and weekly reviews announce such discoveries, periodically, but thus far all have failed to stand the test of time and use.

Of less importance, but still very useful, would be a reliable laboratory test to detect the disease at its onset. Sputum tests are useful only in open cases; they should be made in all cases that produce sputum; they are essential in cases where there is another disease present in the lungs at the same time. The value of the x-ray in the diagnosis of early tuberculosis still remains to be proved (H. R. M. Landis). There are extreme statements made by partisans for and against its use. For purposes of economy, no patient should spend his money on an x-ray plate until asked to do so by the physician that examines the chest. Most patients cannot afford to have plates made merely to satisfy the doctor's professional curiosity or to carry out the advice of a relative or friend.

But, regardless of what the future may bring forth in the way of specific treatments or laboratory diagnostic tests, a knowledge of the evidences of beginning tuberculosis that can be recognized by the patient *will be necessary for all time to come*. The disease must be *suspected*

first by the patient or his medical attendant before a laboratory test will be made. The evidences of tuberculosis do not change; doctors merely discover new evidences and make clearer and more useful the old ones.

CHAPTER V

THE SANATORIUM

A Scotchman being asked what was the best brand of socks to buy replied: "There are no good socks—some are only worse than others." One might have the same opinion of sanatoriums if he believed the statements of some of their patients. But where one patient volunteers a serious complaint, there will be a half-dozen praising the good qualities of the place. Any institution that serves the public will be the object of complaints, but the complaints do not set forth the defects of the institution so much as they do the defects of the complainer. No sanatorium should be condemned because one hears an occasional complaint about it.

What to Expect.—When a person is diagnosed as tuberculous by a competent physician, and his financial condition is such that he can afford to have sanatorium care for six months or more, his physician knowing his physical and mental condition, will decide when and where he should go to get the best care. The experience being new to the patient, he wants to know what he is to get for his money.

A patient has a right to expect certain things, conditions, or accommodations at a sanatorium. Somewhat in the order of their importance he needs:

1. Competent medical service. Pottenger has well said: "The guidance and direction of one who understands tuberculosis and the tuberculous patient is the greatest factor in overcoming the disease."

2. He needs accommodations and conditions that will enable him to take satisfactory physical and mental rest. Webb tells us: "Of all the countless remedies proposed, REST alone has stood the test of time."

3. He needs a proper diet—a variety of good food, well prepared, and tastefully served. Otis teaches, "The nourishment of the patient should receive the most careful attention, and should be adapted to each individual case."

4. He needs to be taught tuberculosis—all of its details useful to him that he can understand, especially those having to do with his personal problem of getting well and staying well.

Medical Mystery.—Many lay persons like and expect a great deal of mystery and superstition in their medical service. Many of them like to take medicine and they speak of different preparations they have taken with reverence and gratitude that is almost religious in its fervor. They are quite sincere when they say: "Dr. Blank's pills saved my life," or "Three

bottles of Dr. Blink's preparation made a new woman of me." One notes also how the tuberculous, before entering as patients, think they will receive some magical or mysterious aid or influence in a sanatorium. They appear to think that Nature's healing processes will bestir themselves in some unusual way and perhaps do a miracle as soon as the sanatorium is reached. But that is not the case.

A sanatorium is a place where as many favorable conditions as possible can be obtained and as many unfavorable conditions as possible can be avoided. There is no mystery about it. One is not better off in a sanatorium than out of it if he does not follow the rules commonly accepted and taught by physicians informed on the subject. He would be as well off at home, and the other patients in the sanatorium, at least, would be better off without him. One cannot *buy* his health back by paying the sanatorium management twenty to sixty dollars the week and disregarding the rules while there. It is *rest* that cures tuberculosis for the rich and poor alike, in a sanatorium or out of it.

Why Go to a Sanatorium?—The question is answered in a general way in the discussion of a previous topic. Only a small portion of the persons with active pulmonary tuberculosis can have sanatorium care for the following reasons:

First, there are insufficient beds and other accommodations at this time. If all the persons

with active tuberculosis in the United States were required to enter a sanatorium on the same day, there would be from twelve to sixteen patients in each bed. The patients would be too thick to thrive and it would be a long time between meals.

Second, only a very small portion of the tuberculous have sufficient money to defray their expenses at a private institution. In looking over a large list of tuberculous patients, including those seen in a free clinic, one finds that only about one out of twelve has enough money to go to a private sanatorium for six months or more *without* financial hardship on himself or his family; and that perhaps one out of ten, can go to a private sanatorium for six months *with* financial hardship on himself and his family. The remaining portion of the patients must go to a tax-supported institution, or one supported by a lodge or some kind of labor union, if they are to have sanatorium care. Collectively, those patients that can go to any kind of sanatorium are but a small part of the entire number of cases. It is apparent, then, that the battle with tuberculosis is being fought largely in patients' homes.

Patients that take the rest cure in a sanatorium usually have better medical service and better opportunity for resting than those that take the rest cure at home. They also rest longer — more months — for frequently the

patient resting at home begins to break his daily routine as soon as he has made a little improvement. One of the best ways to judge the value of sanatorium care is by the patient's opinion, expressed after he returns home, of what he found most useful there. He sums it up frequently in a single statement: "I learned *how* to rest."

The daily routine is learned better at a sanatorium for it is practiced better. This is especially true of patients in State Sanatoriums because the discipline is more rigid than in private institutions. Patients in sanatoriums learn much about the disease from seeing and being told the experiences of other patients. This is of great value to them for when they return to their homes they are usually zealous crusaders against their former enemy—The Great White Plague. The amount of good these former patients do is beyond estimate; they are an important factor in ridding the country of tuberculosis and of ignorance of tuberculosis. More power to them!

The Social Side.—Before entering a sanatorium many patients fear they will be depressed by seeing others of their kind; they fear they will get more infection from close contact with a careless open case; they fear they will see someone have a bad hemorrhage; they fear being in strange surroundings with strange persons at

a time when their physical and mental state makes them shrink from new adventures. But the experience is altogether different after arriving.

There is a delightful feeling of sympathy and mutual understanding among the tuberculous. It is very much like that of soldiers or of ex-soldiers who have had the same military service. They understand one another; they have the same joys, the same sorrows, the same fears, the same dangers to face from the same enemy. And like soldiers, too, they develop a language all their own. The language of the sanatorium is unique and is not always intelligible to the uninitiated. The newcomer is bewildered by it; if someone has "chucked a ruby" he does not understand it; and to be told to "hit the hay and stay put" he finds to be the equivalent of several paragraphs of detailed instruction said in more elegant language. But he learns it, he uses it, he writes it to his friends and family, for it is one of the interesting things learned in sanatorium life.

Many of our greatest novelists, philosophers, artists, poets, and musicians have been tuberculous. Physicians and the healing art, and the mental and physical ills of man have been described in drama, fiction, poetry, and art; medical jokes are as numerous as those on mothers-in-law and the clergy; but the Hall of Fame still has a vacancy—a place for the

humorist that will describe his experience as a patient in a tuberculosis sanatorium. His book should be one of the six best sellers among invalids. The "Battle With the Bugs" is not an unpleasant experience when the diagnosis is made early, and one of the difficulties of the patient in the sanatorium, as well as out of it, is to take his trouble seriously enough to make good use of his time and opportunity to get well.

The State Sanatorium.—These institutions are a godsend to thousands of tuberculous persons year after year. The idea of a state sanatorium is new and has been developed almost entirely during the past twenty-five years. To citizens of the state in which it is located the service is free in a part of them; others charge the patient a small sum ranging from \$2.50 to \$10.00 weekly, according to his ability to pay.

I have had experience with tuberculous patients from all sorts and conditions of sanatoriums both public and private. Among all these patients the best trained come from state sanatoriums. The quality of work done at these institutions usually receives the highest praise from all who are sufficiently well informed to have a right to an opinion. Their defects in serving the public are due largely to ignorance and to a lack of money, neither of which the sanatorium management is responsible for. Their usefulness depends largely on three things:

1. Sufficient appropriation of funds by State Legislatures.

2. The patients to be treated should be diagnosed and sent to them in the early stage of the disease.

3. Education of the public by some means so that everyone will know there are such institutions, what to expect of them, and what not to expect of them. There are thousands of tuberculous persons in America who do not even know that the states in which they live have state sanatoriums; there are still many doctors that do not recognize tuberculosis until the disease is so far advanced that the patients are hopelessly incurable, then try to send them to the state sanatoriums to get rid of them. These institutions cannot do miracles and should not be expected to do them.

Deciding to Go.—Only a small part of the tuberculous have enough money at their disposal to leave home and enter a sanatorium without giving a great deal of serious thought to the welfare of the family left behind. With a considerable number of patients, when the suggestion is first made by the doctor, it appears quite impossible even to go to the state sanatorium where the service is free. The tuberculous wage-earner is confronted with the care of his family during his absence; and the tuberculous mother is confronted with the care of her children, her husband, and the household during her absence.

The tuberculous student wants to finish his year at school; and the young man employed in shop, factory, or office, even though without dependents, regrets the time lost from work and the probable change in his life plans.

Reason, good sense, and good judgment must control in making the decision. If one yields to sentiment in this matter he is likely to regret it later on. The family can and will get along some way for a few months. In working out the problem of the family's welfare during the absence of the wage earner or of the mother, no one is of more use than a visiting nurse of wide experience. Her tact and resourcefulness often enable her to find a solution for the most difficult problems. With free-clinic patients she is truly the doctor's "right hand man."

Who Should Go?—Many things should be considered in deciding the question of going to a sanatorium. The first thought is that of money. If a patient and his family have an abundance of money one would say: "Go, go at once, and stay until safely recovered." But only a few of the patients are so fortunate. If there is money available for only a few months' care in a sanatorium a place with low rates, provided it has a good medical director, should be selected. No patient should be sent to a private sanatorium on money obtained by selling the family's home or by placing a mortgage on it, although this has been done many times. All

kinds of foolish or unwise expenditures of money by families or patients of moderate means should be frankly discouraged. It is bad enough for a family to have a tuberculous member; worse yet to have the family, itself, reduced to a state of poverty by a useless waste of money on the patient.

The best patients for sanatorium care are the incipient cases. They do well when they follow the rules of rest intelligently and consistently; they fail at the sanatorium, as they do or would do at home, when they do not follow the rules. The mere fact of being in a sanatorium has little or no value; it is the daily routine, the *rest*, that is important.

Moderately-advanced cases are usually more careful in carrying out the daily routine than early cases for they have more evidence of the disease that they can recognize. A small percentage of moderately-advanced cases are suitable for treatment by collapsing the lung; this is done by forcing air into the pleural cavity. The doctor calls this operation *artificial pneumothorax*. It is far better that the procedure be undertaken in a sanatorium. Later, the refills may be done at the patient's home.

Whether the advanced case shall be sent to a sanatorium or not is a difficult question to answer. This type of patient may be sent to a sanatorium, either private or public that will admit him, for sanitary reasons, that is, to keep

him from spreading the disease; he may be sent there by a doctor to get him out of town or by a family to get him away from home, especially if there are small children in the home; he may be sent there if he is without a home of his own; but doctors, patients, and families should know that the sanatorium is not responsible for the condition of the patient when he entered. If the patient does not improve, or if he grows worse and finally dies in the sanatorium, let the responsibility be placed where it belongs.

The value of sanatorium care should not be judged by its failure to produce a miraculous cure in a late-stage consumptive, nor by its failure to improve early or moderately-advanced cases that do not follow the rules laid down by the Medical director.

CHAPTER VI

THE DAILY ROUTINE

A tuberculous patient's personal experience follows the course of the first four chapters of this book. 1. He or somebody else *suspects* him as being tuberculous. 2. He is *diagnosed* as tuberculous by a competent physician. 3. He *accepts* the diagnosis and decides to take a rest cure and learn tuberculosis in order to get well and stay well. 4. He follows a daily routine as ordered by his medical attendant.

An ideal patient in ideal surroundings having an ideal medical attendant exists only in the imagination. There is always something lacking, somewhere, so that every patient soon learns that it is up to him to make the best use possible of the advantages that are available from day to day. Success or failure depends very largely on the patient himself, if he is fortunate enough to have had an early diagnosis. He must learn the right thing to do and then do it because he knows it to be right, instead of taking a chance with something he knows is wrong or may be wrong. The gambling habit, the habit of carelessly running an unnecessary risk, is the cause of

many failures, not only in getting well but also in staying well.

Early Family Training.—The influence of early family training is very noticeable in persons taking a rest cure for tuberculosis. Children that have been well-reared and have the habit of obeying are likely to continue the habit as adults. They yield to discipline more readily than adults that were allowed to “run wild” when children. If one refuses to follow sensible rules of restriction when in good health, he is likely to be a poor rest patient, unless the disease is so far advanced in him that he lies in bed from sheer weakness.

Many patients see at the beginning of the rest cure that it is necessary for them to reform and to discontinue the practice of being nervous and wilfully disobedient. Recovering from tuberculosis is a very serious undertaking and not a holiday picnic. Self-control leads to happiness and happiness leads to health. Outbursts of tears, tantrums, and other acts showing a lack of self-control should not be used to get sympathy from one's family or from other patients at a sanatorium. Most tuberculous patients resent sympathy and abhor sob-sisters. The sensible patient should learn as early as possible to avoid anything and everything that affects his emotions unfavorably; in this his family can be of great assistance. Some patients are born with, and have by family training, what is called

“good sense,” or more commonly, “good common sense.” This is a valuable asset to a person taking a rest cure and adds much to the probability of his success. Types of patients will be considered in detail.

The Soldier Type.—One meets from year to year a few patients that apparently are afraid to risk their own judgment on the details of their daily routine. They say to their medical attendant: “I am like a soldier; I want definite orders given me, and then I will carry them out.” This they do and as a consequence get good results from the rest cure.

The Reading Type.—Among good patients one meets frequently, in these days, men and women that read books and periodicals on tuberculosis. There is an abundance of good literature on the subject, which is written in simple layman’s language. These patients accumulate a lot of knowledge useful to themselves and to their families, and are often zealous warriors in the battle against tuberculosis. As a rule they have good self-control, a detailed knowledge of what to do and what not to do in the daily routine, and they use good judgment, not because one doctor has told them what to do, but because they have found that other doctors through the printed page have given the same instruction. These patients get the best results obtainable from the rest cure.

The Indifferent Type.—This type of patient

has two conspicuous faults: He is not sure that he knows what to do, and he has not enough will power or self-control to do the things he knows should be done. He is a dabbler. He follows his best judgment very carefully for a few days and then lapses into a state of indifference and appears to be without judgment for a few days. He states that he would like to get well and stay well, but he obviously does not want to do what is necessary to accomplish this. Nature sometimes heals the indifferent patient in spite of the fact that he will not follow what he has been taught is necessary for recovery. But observation of this type of patient year after year shows the outlook is not good for most of them. They have their ups-and-downs for years but finally go down and out.

The Speedy Type.—This type of patient appears to be unable to learn that tuberculosis, in the adult, is usually a chronic disease extending over years of time. He is also unable to learn that it sometimes takes longer to go up a hill than it does to go down the same hill. He frankly admits that he has been going down hill from six months to several years, but thinks he should go back up the hill in a few weeks or even in a few days. He often gets well *in his head* after having had a month's rest but, later on, he learns with sorrow that getting well in his head does not mean that he has got well in his chest. He learns, sometimes without serious

injury to himself, that it takes Nature a long time to form firm scars in his lungs.

The Rebellious Type.—This type of patient appears to have been born wrong. He is no more wrong about tuberculosis than he is about many other things. When first diagnosed he expresses an opinion to the effect that luck, fate, society, God, and justice are all against him and even intentionally unfair to him. Should he enter a sanatorium his sojourn there is likely to be brief and stormy. He finds the doctors incompetent, the nurses and other attendants indifferent, the food impossible, and the patients unfriendly. He leaves the institution for fresher fields and no tears are shed or regret felt by anyone there because he has left. Should he attempt to take a rest cure at home the results are no better. Everybody is wrong and he, alone, is right. Ultimately he may die as a pauper, but he remains rebellious to advice, rules, restrictions, and suggestions to the end.

The Rest Cure.—At the present time the principal thing having to do with recovery from tuberculosis is rest in bed, and for that reason one speaks of taking a *rest cure*. Truth is often unpleasant and doctors that deal with the tuberculous say unpleasant things to their patients daily, just as they do in writing books on tuberculosis. As soon as a tuberculous person is diagnosed and told that a long period of full-time bed rest is necessary, he will usually begin at

once to recite the well-known expression that "milk and eggs and fresh air are the principal things needed." The patient does not make the statement because he really knows what the principal things are, but because a long period of bed rest is an unpleasant experience and he would like to avoid it. He seeks at once an easier way than that ordered by his medical attendant. Fortunate is the patient who, from the beginning of the rest cure, tries intelligently and faithfully to carry out its details instead of seeking easier and more pleasant ways to travel the road to recovery.

The Hours in Bed.—As soon as a tuberculous person is told to go to bed he immediately asks, "How many hours a day shall I lie in bed?" No general answer can be given the question for each patient is an individual problem. Much depends on the patient's age, the amount of disease he has, his natural powers of recuperation, and the length of time he has already pursued the rest cure. The young adult with incipient disease that has fever—any amount of fever—should be a bed patient twenty-four hours daily, unless the fever can be traced to some other cause than tuberculosis. With very few exceptions all moderately-advanced and late-stage cases should lie in bed all hours of the day when the rest cure is begun. This is imperative in the case of young adults, but **middle-aged** and elderly patients may be allowed more time

out of bed. Elderly patients do about as they like regardless of their medical attendant's advice. The best rule for the patient to follow is to remain in bed all the time he can instead of trying to coax and wheedle the doctor into giving him more time out of bed. It is rest and not doctors' rules that cures tuberculosis.

The Weeks, Months, and Years.—From the day of diagnosis until recovery takes place, the doctor is asked frequently, "How much longer must I lie in bed?" This the doctor cannot answer definitely for he knows the tuberculous have recovered without any special rest, and that vast numbers of them have died of the disease because of a lack of early diagnosis and proper rest. The doctor knows that new-formed scars are easily broken down and that the patient might destroy in a few days what it has taken Nature months of time to build up. He wants the patient to follow the rule, "Safety first."

If the doctor has had extensive experience with the disease over years of time, he can tell in a general way about the length of time the patient must have rest hours in the daytime in addition to his usual rest at night. The patient can tell by his feelings and his health history how long he has had the disease. He should also know that he gets well by the formation of scars in the lung tissue, and that scars strong enough to resist strain are formed very slowly. With very few exceptions, recovery from tuberculosis

should be thought of in terms of years, rarely as months, and never as weeks. This does not mean, however, that early or moderately-advanced cases must lie in bed for years; but it does mean that for years they should protect their scars from physical strain that might break them down, protect themselves from fatigue, and that the resistance of the body to tuberculosis should not be permitted to run down.

Mental Rest.—When a tuberculous person is ordered to take a *rest cure* it means that he must rest mentally as well as physically. Resting mentally is sometimes more difficult than resting physically. As a rule the greatest obstacle to mental rest is the patient's feeling of responsibility. He worries about the welfare of his family, his or their lack of money, his loss of time from employment, and his inability to carry out his life plans without interruption. His family can relieve him from many of these worries by keeping him in ignorance of many things that would worry him. If taking a rest cure at home, there is no reason why the patient's room should be a battleground, courtroom, or open forum where all the family and neighborhood troubles are brought for discussion and settlement. If the patient takes the rest cure in a sanatorium, it is much easier to avoid unnecessary worry.

Patients with fever should not read, write letters, or have company during the time that

fever is present. Also, any kind of excitement, work, games, or diversions that cause increased pulse rate or increased temperature should be discontinued when possible.

Rest Position.—One tires of lying in the same position very long and unconsciously changes it. But if one has active disease in only one lung it is well that he train himself to lie on the diseased side; this will aid in keeping the diseased lung at rest. Also, the old rule known to patients for years that they should not sleep with the arms above the head has some merit. It is also well to practice breathing with the diaphragm until abdominal breathing becomes habitual. This may be learned by placing the hand over the navel and consciously forcing it upward with the abdominal wall while inhaling. This done over and over, many times daily, will enable one to form the habit. The purpose of this is to use the lower part of the lungs for breathing rather than the upper; active tuberculosis is usually in the upper part of the lung, especially in the early and moderately-advanced stages.

Breaking Rest Rules.—Very few patients realize *in time* the importance of rest in overcoming tuberculosis; many thousands of them realize it *too late*. Patients want a quick method to recover from tuberculosis—so do doctors! But there is no quick method known at this time and the patient has the alternative of taking a

rest cure or of gambling on the possibility that nature *may* heal the disease spontaneously. The chances are very unfavorable to the gambler and the rest cure is long and sometimes disagreeable. If one has been fortunate enough to have been diagnosed after having *felt* tuberculous only from three to six months, the time spent in taking a rest cure is not long nor should it be especially disagreeable. In any case whether the time be short or long, the patient should solve the problem and confront the future from the standpoint of reason, and not from the standpoint of sentiment and useless wishing for a quick medical cure. Being a good rest patient, a good "chaser" in the language of the sanatorium, will get him well quicker, cheaper, and with less invalidism, when recovery has finally taken place, than if he had broken rest rules when he felt like it. The patient must remember that it is *he*, and not the doctor, that is trying to get well. The doctor is only an interested observer trying to direct the patient along the road to recovery, health, and usefulness.

Getting Weak.—Nearly all tuberculous patients are weak when diagnosed. They speak of their weakness as "loss of pep," "tired out easily," "all run down," or "a nervous breakdown." Some of the patients, especially when influenced by an elderly person, have a fear of getting weak or weaker by lying in bed, but this will not occur unless the patient is in his last

illness. The patient may lose his balance sometime when he tries to walk; he will sometimes get "wobbly," as he calls it, but he need have no fear of getting weak. He will always be able to do all the walking his doctor wants him to do.

Changing Climates.—A belief very commonly held among lay persons, especially those of middle age and older, is that as soon as a person is diagnosed as tuberculous, he should change climates. But before a change is made by a patient certain facts should be made known to him.

The first essential in one's taking up a new place of residence is to have enough money with which to support himself comfortably in the place selected. No one should go to a health resort hoping to earn enough money by means of part-time employment to support himself while taking a rest cure; nor should a family with a tuberculous member, give up the employment it has and go out West in search of health and employment.

Twenty-five years ago one could see an outfit consisting of a team of horses, an old covered wagon, a dog or two, one or more children, a man, and an emaciated coughing invalid lying on a mattress in the wagon, traveling westward in quest of a consumption cure. With or without professional advice they were making the great adventure. Today the team and covered wagon have been replaced by a cheap motor car, the

dog has dropped out of the picture, but the general appearance of hopelessness and poverty are apparent now as then. These poor ignorant people are following the advice so commonly expressed by elderly persons to "go out West and drive 'round and you'll get well." There are times when ignorance is a crime. This is one of the times.

Sanatorium rates with medical service vary from twenty-five to sixty dollars the week. Boarding houses in health resorts are cheaper, but there are numerous disadvantages in living in them, unless one is well trained in carrying out his daily routine. A patient that worries about his expenses and the hardships and sacrifices that his family must undergo to keep him in a sanatorium, would better remain at home, for the worry will do him more harm than the climate will do good. If there are funds available for a stay of only a few months at a sanatorium, thought should be given as to what will be the most pleasant months to spend there, as well as the most unpleasant months to avoid at home. Traveling around to find a good climate is largely a luxury for the wealthy, not a necessity for the poor.

An untrained tuberculous person should not go to a place where he cannot get competent medical service. Because a doctor lives in a town, city, or part of the country that is said to have a good climate for tuberculosis does not necessarily qualify him for taking care of tuber-

culous patients. Doctors that are qualified in tuberculosis work are usually known by the superintendent of the state tuberculosis sanatorium and medical directors of private sanatoriums in the state in which they live. Information relative to competent medical service in the place selected for taking the rest cure, should be known by the patient and his family *before* the journey is begun. A tuberculous patient running wild at a health resort is no better off than he would be running wild at home, and his family is worse off financially.

Spending money lavishly at a health resort at the *wrong time* is not a satisfactory substitute for early diagnosis and a rest cure, at or near one's home, at the *right time*. Yet this is done in thousands of cases every year. One cannot be blamed for wanting to live in a good climate whether he is well or sick, more especially when sick; but an early diagnosis and satisfactory rest cure at home, at one's state tuberculosis sanatorium, or at a private tuberculosis sanatorium near one's home, is far better than a "neighborhood" diagnosis followed by a hasty, ill-advised journey to some earthly paradise where the climate is expected to balance the account.

Sick or well, persons of wealth can indulge their whims regarding climate, travel, motor cars, and other luxuries—and it is right that they should. But, few of the tuberculous are wealthy and a large portion of them must care-

fully count the cost; they cannot afford to waste money, and they should early learn the difference between necessities and luxuries, for it frequently happens that in their misguided eagerness to get a luxury, they do not have the necessities of life. As an illustration:

While writing this chapter there came to my free clinic a tuberculous patient, a manual laborer, twenty-one years of age, whose home was fifteen hundred miles to the east. While at home he had a hemorrhage, was diagnosed as tuberculous by the family physician, and advised to "go West at once." This he did. When seen in clinic the second day after arriving here he was unable to work, he was without money, and was being sheltered and fed by the Salvation Army. Of this type there are large numbers drifting about from place to place. They are controlled by an idea given them by a grandparent,—or a doctor that is just as ignorant of the facts,—and believe that somewhere they will find a climate that, alone, will cure them. The patients, their families, and supporters of charity organizations, pay the penalty,—the penalty of ignorance.

When one looks over the final results he concludes that many patients, rich and poor alike, have failed, not because of the climate or of not enough money, but because they were not diagnosed in time and did not take the rest cure early and thoroughly, at or near their homes.

It is quite unnecessary, here, to enter into a discussion of the good and bad qualities of health resorts. All have their zealous defenders and advertisers; all have stories of remarkable or even miraculous cures; some have large cemeteries and potters' fields for they have received many patients, not a few of them paupers, that were but a few days, and in some cases only a few hours from death. There is no place that has an ideal climate throughout the year, and there is no place that does not have good climate during parts of the year. The tuberculous die in every climate, and the tuberculous get well in every climate.

Most patients should be observed several days, or even several weeks, by a competent physician to determine whether a change of climate is advisable. A decision should be made only after a thorough study of the patient's physical, mental, social, and financial condition, as well as of the merits—medical service, humidity, sunshine, altitude, expenses, etc.—of the health resort to be selected. Hasty and unwise action in the matter of changing climates has brought many patients and their families to financial hardship or even to poverty, without benefit to the patients. The old adage, "Look before you leap" is a useful warning here.

Taking Medicine.—Patients and families that have had no experience with present-day methods of recovering from tuberculosis often ask if they

are not to take some medicine. They appear to think the doctor has forgotten something if he does not write a prescription. Some would like to take creosote; others are certain that codliver oil is indicated; and a few are disappointed because they do not get some hypodermic medication of some kind. Many patients call all medicine given with a hypodermic needle "se-ri-um" (serum), regardless of what it is, and appear to think the "serium treatment" will cure anything and everything from clubfeet to bald heads. As a rule the tuberculous need very little medicine, and many patients go through a rest cure without taking medicine of any kind.

The Diet.—One could write a volume of advice on the diet of the tuberculous patient, but little of it would be read and less, still, followed. In the sanatorium the diet problem is studied and handled the best way possible by the medical director and a trained dietitian. A patient taking the rest cure at home should have very little trouble with the diet, unless he is an advanced case; these suggestions are for early and moderately-advanced cases.

The first thing the family must learn is not to overfeed the patient. If a patient is underweight, it is well that his weight be gradually increased to what is normal for his height and age, but no more. The patient does not recover by getting fat but by the formation of scar tissue in the lungs.

Constipation is one of the most difficult problems of the patient, especially in women patients. Constipated patients should not drink milk after the mid-day meal nor should they eat meat at the evening meal. Milk is constipating to many persons; meat at the evening meal is also constipating to many. The evening meal should consist largely of fruits and vegetables, both raw and cooked. Fortunately, satisfactory food for the evening meal is available in all seasons in nearly all places. Apples, raw cabbage, "greens," celery, and prunes are some of the regular stand-bys. There are many other fruits and vegetables at different seasons to furnish variety. It is well to eat a raw apple or other raw fruit before going to sleep at night. A patient who can and will take an evening meal that prevents constipation should have little or not trouble with his diet.

The diet of the family forms the basis of the patient's diet when taking the rest cure at home. Most tuberculous patients that are underweight need a pint or more of good fresh milk daily. Milk contains substances that are especially useful to the tuberculous. One cannot be too careful in selecting milk of good quality that is kept clean from the producer to the consumer. Also, the patient should be very careful to clean the mouth thoroughly after drinking milk, otherwise he is likely to get "set against" taking milk.

Eggs are an excellent food for the tuberculous.

They are more easily digested when slightly cooked than when taken raw. It is problematic whether the average patient can digest and assimilate more than three eggs daily. The practice of stuffing tuberculous patients at all times of the day and night with milk and eggs in various combinations has been discontinued and is now considered a relic of the "dark ages" of tuberculosis work.

Tuberculous patients, diagnosed at the right time, have very little trouble with the diet when taking a rest cure. Much of the traditional talk among lay persons and poorly informed physicians relative to the diet of tuberculous patients has to do with efforts made to feed moderately-advanced and advanced cases. To delay the diagnosis and rest cure until the disease is far advanced and then hope to correct the error committed by unusual dietary measures, is about as successful as sending a far-advanced case out West to have the climate do a miracle on him. Diet and climate do no miracles; early diagnosis and rest are the essentials.

Tuberculous patients should drink an abundance of water. Cold water may disturb the digestion when taken during or just preceding meals. Warm or cool water is safer. Water is good for nervous patients and for those who complain of insomnia. Water with meals appears to be harmful to some patients; one's own experience is the best guide. A glass or two of warm

water a half-hour before breakfast aid in preventing constipation. From two-thirty to five-thirty in the afternoon is a good time to drink water.

Tuberculous patients are usually weak—weak all over. They are easily fatigued physically and often, mentally; that is one of the reasons they are irritable. These things are said to explain to the reader that the stomach and intestine are also weak. For that reason they should not be overworked by overfeeding. If the patient is gaining weight satisfactorily, or has normal weight for his height and age, it is well to omit milk one day of the week, and eggs another day of the week. It is also well, especially when the appetite is not good, to omit the evening meal,—except for some raw fruit or a salad,—once or twice a week. For most patients three meals a day are enough, and there should be no eating between meals, except for the apple or other fruit at bed time.

All meals should be eaten slowly and the food chewed well. The quantity of food taken at a meal should be small enough that the patient will know by his appetite, instead of by looking at the clock, that “it’s time to eat again” when the next meal comes. The patient and his family must remember that it is the amount of food that is digested and assimilated that really counts and not the amount that is eaten. Do

not let a sympathetic grandmother stuff the patient.

The Hours of Sleep.—Normal sleep is the most perfect form of rest. Fortunate is the patient that can sleep all night and part of the day. Insomnia, or inability to sleep, has many causes, some of the most common among them being: worry, indigestion, uncontrolled cough, afternoon naps, coffee at the evening meal, a lack of water in the system, asthma, palpitation of the heart, noise, light, strange surroundings, a poor mattress, or the patient is cold or too warm. Merely mentioning the causes will lead the patient to change most of them. A patient that feels cold in the winter time often needs two mattresses on the bed rather than more cover. Cold feet can be kept warm with woolen stockings—heavy and long ones are the best—or an artificial heater of some kind may be used in the bed. A glass of water will often cause a patient to go to sleep in a few minutes. The slamming of a door, the flapping of an awning, or rattling of a window can be stopped. Someone snoring within hearing distance will prevent sleep and try the patience of a saint. No appropriate punishment or place of abode has ever been selected or provided for snorers; they don't belong with the angels, and the devil wouldn't have them; the problem of what to do with them remains unsolved.

It is unwise to give medicine to produce sleep

until other measures have been tried thoroughly and have failed; it is unwise to give an opiate at any time to produce sleep. There are too many morphine addicts among the tuberculous; the habit may be formed by taking cough syrup containing opiates. These addicts make the rounds of free clinics and doctors' offices seeking morphine or prescriptions for morphine. They tell of the serious hemorrhages they have had a few hours or the day previous, and plead with the doctor to give them morphine; their stories are not often true.

Colds.—A patient taking a rest cure seldom has a severe cold. Any kind of acute respiratory infection is noticed by the patient and may be the cause of much worry to him. On the other hand one sees patients who continue to speak of the respiratory evidences of active tuberculosis as “a cold” just as they did before the diagnosis was made. It is a form of self-deception practiced by many of them. A patient with a cold should take full-time rest until the cold is healed. He cannot afford to do otherwise.

Hoarseness.—A condition more feared by the doctor than the patient is hoarseness. A severe involvement of the throat (larynx) is one of the worst complications of the disease. Hoarse patients should discontinue the use of the voice and use pad and pencil for making known their needs. It is easy but dangerous, *very dangerous*, to disregard this rule.

Cough.—The subject will be described in detail in Chapter VII. At this time it is only necessary to say that coughing is largely a matter of habit and in incipient and moderately-advanced cases can be controlled by the patient after a few days' effort. Advanced cases may require a cough sedative to enable them to sleep.

Temperature Record.—The temperature has been described in detail in Chapter II and need not be repeated here. It is well that the patient's temperature be taken daily and a record of it made during the first month of the rest cure. The reading at 7 A. M. and 2 and 4 P. M. will be found useful. Later the temperature need not be taken with such frequency or regularity. Nervous patients often develop more nervousness, fear, and worry by taking the temperature too often. In such cases the practice should be discontinued.

The patient should compare his thermometer with that of his medical attendant to see if it is accurate. An inaccurate thermometer may be used, provided the patient knows the extent of its inaccuracy. The thermometer should be grasped firmly in shaking the mercury down to 96° or 97°. Some patients break several instruments by failing to grasp them firmly enough. (See also p. 32.)

A Changed Life.—As the patient follows his new routine week after week, hears and heeds his doctor's advice, reads tuberculosis in books

and periodicals, he adapts himself both physically and mentally to the new life. What, at the beginning of the rest cure, was considered a hardship is now unnoticed. At first he thought his future life would consist largely of unpleasant self-denials—things he could not do, *must not do!* But as the months pass by he has taken up new interests, new pastimes, new habits and new acquaintances. He lives what doctors call a “protected life,” but only a few persons among his acquaintances know it. For two or three years he takes no exercise to cause fatigue, he goes to bed early, he learns and practices moderation in all things, and he usually enjoys life as much as he did before he took the rest cure.

CHAPTER VII

SANITATION

Few things are more pleasing to a physician who deals with the tuberculous than to see good sanitation in the home of a tuberculous patient. Good sanitation depends on two things: knowledge of what to do, and constant care in doing it. It is easier to learn the rules than it is to use them; it is easier to use them when one knows *why* they should be used. Sanitation has two purposes: To prevent the spreading of disease, and to aid the individual patient to recover his health.

The Cough.—If one coughs with his mouth open before a mirror he often sees droplets of moisture on the mirror. Or, again, nearly every grown person has been the unwilling victim of a coughed spray from some uncouth lout that coughs with his mouth open and sprays whoever is in spraying distance. One droplet of such spray coming from an open case of tuberculosis may contain a score of tuberculosis germs. It is easy to see then why infection from a careless cougher is possible.

The tuberculous person should learn to control the cough if he has one. This can be done in

most early and moderately-advanced cases in a few days. Until the cough is under control he should place a paper napkin or a piece of toilet paper over the mouth when forced to cough. The napkin can then be placed in a paper bag that has been pinned to the edge of the bed. The bag and its contents should be burned daily, or oftener, if necessary. The patient should not cough in his hand and then consciously or otherwise wipe the hand on the bed covers. Also, the custom of coughing and expectorating into an old rag, then folding it up and placing it under the pillow for future use, is very objectionable. Use tissue paper and then burn it.

Careless Spitters.—Very few grown persons of normal intelligence are ignorant of the evils of careless spitting, yet the evil is continued year after year. It is due in part to poor family training, carelessness, and to habits used in the unrestricted freedom of outdoor life. Persons living in the wide open spaces, out of doors during most of the hours they are not asleep, spit where and when they please. They do not always change the habit when in places where careless spitting is a menace to the public health. If one will look at the sidewalks of a small city or country town during County Fair Week or on a Circus Day he will think the wag's statement that, "They came to cough and remained to spray" needs an addition—they came to spit, too.

Intimate Contact.—There is danger in prolonged intimate contact with open cases of tuberculosis. The danger is greatest for newborn babies and small children. Among adults the greatest danger is probably to be found in sleeping in the same room, especially in the same bed, with an open case. This unwise intimate contact is due largely to ignorance or to sentiment.

Many tuberculous persons have remained undiagnosed until they became open cases—in fact the diagnosis was made by finding germs in the sputum. How long the patient was an open case before the diagnosis was made is a matter for speculation. It may have been a few days or a few weeks; in some cases, probably months or even years. This is a deplorable situation from the standpoint of sanitation as well as from the standpoint of the patient's welfare. Usually when a person is told that he is an open case he discontinues intimate contact with members of his family and others. Occasionally the usual intimacy is continued contrary to the doctor's orders and one sees small children sleeping with a tuberculous parent, or two adults, one of whom is tuberculous, sleeping in the same bed.

There is no danger in brief social or business contact with a tuberculous person. In sanatorium life doctors and nurses deal with the tuberculous daily, year after year, but do not develop tuberculosis. Much of the fear that lay

persons have about the disease is without foundation. It is the person that is tuberculous *and does not know it* that does the most harm.

The Sputum.—Early cases of tuberculosis, as a rule, do not produce sputum due to the disease and are not in the infectious state, so long as they remain closed cases. Moderately-advanced cases may or may not produce sputum. When they do produce sputum it should be examined repeatedly to determine the presence or absence of tuberculosis germs. Advanced cases *usually* produce sputum, and the sputum usually contains tuberculosis germs, although they may not be found until several examinations have been made.

Patients with germs in the sputum should be very careful not to infect other persons. They should control the cough. They should always expectorate the sputum as it collects in the throat. Many women patients and a few men patients, through a sense of modesty or secrecy, swallow the sputum until taught better. This practice is both filthy and dangerous. They should use paper napkins or sputum cups. When away from their beds they should use pocket sputum flasks. Used napkins and sputum cups should be burned daily.

Tuberculosis of the intestine is the most common complication of tuberculosis of the lungs. In nearly every case it is caused by swallowing sputum that contains tuberculosis

germs. To prevent tuberculosis of the intestine the patient should be diagnosed *before* he has tuberculosis germs in the sputum, and in those unfortunate cases that have germs in the sputum doctors and visiting nurses should teach the patients the danger of swallowing the sputum.

The Patient's Bedding.—The linen from the bed of an open case of tuberculosis should be kept separate from that of the family until placed in the water in which it is to be boiled. Blankets, pillows, and mattresses should be aired and sunned thoroughly every week or oftener. If the patient can afford it he should have two complete sets of bedding, one set being aired while the other is in use. Sunshine is the best disinfectant.

Dishes, Knives, and Forks.—The tableware used by a patient that is an open case should also be kept away from that used by the family. There are two theories about the original entrance of tuberculosis germs into the body: one theory is that they are inhaled; the other, that they are swallowed. It is necessary to be careful to avoid both sources of infection.

The Mouth and Teeth.—The care of the mouth and teeth is a thing of great importance to the tuberculous in all stages of the disease. Every patient, as soon as diagnosed, should, if possible, have his teeth cleaned by a dentist. Decayed teeth and infected gums are found very frequently in the tuberculous. French physi-

cians claim there is a common cause for dental disease and tuberculosis, namely, a lack of lime and other minerals in the body.

The mouth should be washed thoroughly after taking milk by squirting water back and forth through the teeth, cleaning the buccal cavities, the throat, and lingual cavity. One of the last mouthfuls used should be of a weak solution of soda, for the mouth is normally alkaline. Some patients make a stock solution of soda by putting two teaspoonfuls of soda (common baking soda) into an eight ounce bottle of water. The bottle is kept on the table beside the bed, and a small quantity poured into the drinking glass to finish the toilet of the mouth. This is more convenient than making up a fresh solution every time.

The teeth should be brushed three times daily. Two brushes are necessary; they should be used alternately; after being used the brush should be cleaned and hung in the sunlight. A careful use of toothpicks is often desirable by certain patients whose teeth collect particles of food not easily dislodged by brushing. Dental floss is better than toothpicks, but few persons will use it. Dentists tell us that we do not use the toothbrush right. It would be well if the patient would have his dentist give him thorough instruction as to the method of brushing the teeth, for well-educated dentists are far better informed on this subject than physicians.

The Bath.—Definite rules for bathing cannot

be given. What constitutes physical cleanliness depends upon one's race, nationality, family training, personal habits, occupation, and opportunity for taking a bath; it is a relative term. A tuberculous patient living in a tent in the Southwest may not see a bath tub for a year. Patients living in a sanatorium conform to the rules of the institution or their own wishes. Advanced cases should follow the advice of the attending physician. Most patients will find a warm bath twice a week satisfactory except in summer time when a daily bath is usually indicated. Washing one's own hair has sometimes caused hemorrhage; this is especially true in women patients. If one has disease in one lung only, he would better use the hand on the normal side in taking the bath. Briefly, one considers in the matter of bathing three things: cleanliness, comfort, and freedom from strain or unnecessary movement of the chest.

Catching Colds.—At the present time doctors do not know definitely the cause of colds, nor do they know whether the disease is caused by one kind or by a mixture of several kinds of germs. One thing, however, seems to be fairly well established: colds are contagious. For that reason all persons with colds should be excluded from a tuberculous patient's room. After patients have recovered from the disease and begin to mingle again with the outside world, they should be careful to avoid indoor crowds, bad

ventilation, electric fans in summer, and close contact with coughers and sneezers in winter.

Ventilation.—Nearly all intelligent persons talk freely about *fresh air* for tuberculous patients, but in dealing with these patients the doctor finds that in many cases they get no farther than *talking* about it. The problem is especially difficult in winter because many patients are very sensitive to cold. During other seasons of the year there is little reason for having poor ventilation. Many tuberculous patients have bad odor to the breath; this is especially noticeable in open cases and cases with cavity, as well as in those that do not keep the mouth and teeth clean. Personal cleanliness, then, is one requirement in preventing bad odor in the patient's room.

The ideal place for a patient is a sleeping porch, open on three sides, built on the south side of the house. If the patient must occupy a room, windows should be open on two or three sides, and an outside door, open, would make for still better ventilation. The air in the room should move. On entering the room there should be no odor detectable by one who had been in the open air several hours. Reason and the sense of smell are the best guides to good ventilation.

Closed Cases and Open Cases.—All cases of active pulmonary tuberculosis may be divided into two classes: (1) closed cases and (2) open

cases. A closed case is one that *does not* have germs in the sputum; an open case is one that *does* have germs in the sputum. All cases of pulmonary tuberculosis *begin* as closed cases. The case usually remains closed for months or years before it becomes an open case. At this time all well-informed doctors try to have their patients diagnosed as closed cases instead of waiting until the disease is so far advanced that the patient has germs in the sputum.

It is probable that many persons have closed cases of tuberculosis and overcome the disease without having known they were tuberculous although they knew they had a period of sub-standard health. Postmortem examinations, that is, examination of bodies after death, show scars of healed tuberculosis in a considerable number of the bodies examined. Sometimes, even, cavities are found at postmortem examination in the lungs of persons that had never been diagnosed as tuberculous while living.

Tuberculosis germs grow *in the lung tissue*. They do not grow *on* the mucous membrane as cold germs do. Whenever a small diseased area in the lung tissue breaks down and sloughs off into a bronchial tube it forms an ulcer. The diseased tissue and sputum from an ulcer contain tuberculosis germs. If the person examining the sputum from a tuberculous patient who has an ulcer in the lung is lucky enough to take for examination a portion *that came off an ulcer*, he

will find tuberculosis germs in it. The doctor, then, classifies that patient as an *open* case, and the laboratory worker speaks of a *positive* sputum from the patient. If the patient recovers, the ulcer heals sometime during the recovery and the patient is then a *closed* case, until complete recovery of all the diseased area takes place.

All persons diagnosed as tuberculous should have the sputum tested periodically to see whether they are open or closed cases. It is the open case that is the greatest sanitary problem, for it is the open case—usually, the *undiagnosed*, hence, *untrained* open case—that is responsible, largely, for the spreading of the disease. Frequently a patient thinks he is not an open case because one examination of the sputum did not show tuberculosis germs present. This conclusion is too optimistic, for in many open cases the sputum has been examined a score of times before germs were found. Many persons have been diagnosed as closed cases, but later, because of the formation of an ulcer, they have become open cases.

The Patient's Room.—As elsewhere stated, the ideal place for a patient's bed is on a sleeping porch, which is open on three sides, and placed on the south side of the house. Sunshine is necessary. Means should be provided to protect the patient from rain, snow, and disagreeable wind. If the house occupied has no sleeping

porch and it is impractical to build one, the patient should be placed in a room as nearly like a sleeping porch as possible. There should be windows on two or three sides. Often additional windows and an outside door can be placed in a room with small expense.

It is not what the place is called but what it affords that is important. One sees places called "rooms" that are more suitable for patients than places called "sleeping porches." There must be free circulation of air. There must be opportunity for the patient to lie directly in the sunlight. The amount of time and the extent of the body exposed to the direct rays of the sun must be ordered in detail by the attending physician and the orders should be strictly obeyed. In summer one can easily get too much direct sunlight; in winter one is likely not to get enough. The room should be free as possible from unnecessary furniture, and the noise and bustle of the household. Rest for a tuberculosis patient includes mental as well as physical rest.

Mental Hygiene.—A large portion of the tuberculous are irritable. They are often conscious of the irritability for months or years before they know its cause. They are likely to worry a great deal and many trivial things irritate them that would not have done so, before they became tuberculous. For this reason they must be protected mentally as well as physically.

One of the greatest difficulties in taking the

rest cure at home is the constant turmoil that goes on in the patient's mind. The average home may be changed into a hospital for ten days or two weeks to care for a patient with pneumonia, for the danger of death is so great, the possible changes in the patient's condition so alarming, the presence of the doctor once or twice daily, combine to enforce a rigid discipline for good judgment and silence. But a home with such tension month after month would cease to be a home. A tuberculous patient needs peace and quiet and cheerfulness for months, instead of two weeks.

A tuberculous person diagnosed in the early stage, or one in later stage that has responded in a satisfactory manner to a rest cure, does not look sick. He looks like a normal man. His friends and neighbors—even some of his relatives—can see no reason why he should lie in bed twenty-four hours daily. Many of these good people are so full of advice that they go about seeking an opportunity to set the world right, and a normal looking person taking a full-time rest cure furnishes a golden opportunity to turn loose a lot of evil and unsolicited advice. Their advice is often contrary to the doctor's. They tell the patient to get up, get out, take exercise, get out and rough it, etc., etc. The patient is worried, irritated, and often his temperature is higher or the pulse rate is increased after listening to them, and perhaps arguing with them,

because his doctor has ordered complete rest. But that is not all. A visitor may have tact enough not to advise the patient about his disease and the method of recovering from it, but he sees no harm in telling the patient all the neighborhood news, if necessary, taking an hour or two to do it. Such visitors should be rigidly excluded from the patient's room. One cannot be too careful in protecting the patient's peace of mind.

CHAPTER VIII.

EVIDENCES OF IMPROVEMENT.

As soon as a tuberculous patient accepts the diagnosis and begins his rest cure he wants to know the signs of improvement that may be expected to appear. The evidences of improvement are inconstant both as to time and as to the thing observed. One patient may show improvement after a single day of bed rest, another, not until after several weeks, and a third only after several months. It is therefore quite impossible to set forth in detail what will happen as well as the time it will happen. No two patients have the same amount of disease; no two have the same power to recuperate; no two can and do rest the same, even though both of them lie in bed twenty-four hours daily, for *rest* includes mental as well as physical rest, and the mind, like the tongue, is sometimes an unruly member and refuses to rest. Let it be said again to the reader that he need not expect the evidences of improvement to appear in the order given in this chapter.

The Cough.—Cases of beginning tuberculosis usually do not cough at all or have only very slight cough. Much depends on the climate, the

season of the year, and the patient's social training. Moderately-advanced cases are more likely to cough than beginning cases; and advanced cases that are undiagnosed, hence untrained, nearly always cough more or less. One of the first rules given a tuberculous patient is *to quit coughing*. Coughing is largely a matter of habit and can be controlled. Very frequently after two or three days of effort, it has either been suppressed by the patient or greatly diminished. This, in some cases, is one of the first signs of improvement.

The Appetite.—Periodic poor appetite is very common in the tuberculous. It may be present in the beginning case as well as the advanced case. An improvement of the appetite may take place by the end of the first week of the rest cure. This is very likely to occur if the patient's diet is changed to conform to the simple rules laid down elsewhere in this book.

The Fever.—The young tuberculous adult that is on exercise is very likely to have slight fever in the afternoon. Tuberculous patients over forty years of age are not so likely to have fever; frequently these older patients have sub-normal temperature as do the young adults, also, very rarely. Full-time bed rest will often reduce the temperature of the tuberculous within a week or two. In other cases the fever will persist for months or years; this is especially true in nervous women.

Constipation.—Large numbers of the tuberculous are more or less constipated; this is noticed in women more than in men. Full-time bed rest *with proper diet* usually relieves constipation entirely within the first month and often, within the first week.

The Pulse Rate.—Increased pulse rate is usually found in the tuberculous of all ages and of all stages at the time the diagnosis is made. When on exercise the afternoon rate is usually above eighty-five to the minute. Full-time rest will usually lower the rate within a week or two. Sometimes the increased rate will persist for months or years, especially in nervous patients, or those with extensive involvement of one or both lungs. A few patients have normal pulse rate regardless of their age or the extent of the disease.

The Weight.—Most lay persons think of the tuberculous as they appear in advanced cases, that is, as being greatly underweight. But beginning cases may have normal weight or even be overweight. Occasionally one sees a patient with extensive involvement of one or both lungs, who is overweight. To the patient that is underweight, nothing is more gratifying than to see the weight increase from month to month. Full-time bed rest will usually cause the weight to increase, in early cases, by the end of the first month; rarely, there will be an increase at the end of the first week. Advanced cases some-

times do not show improvement in weight until they have rested several months.

Sputum Production.—Many early and moderately-advanced cases of tuberculosis do not produce sputum, although nearly all advanced cases do. Much depends on the stage of the disease, the climate, the season, and the presence of other disease involving the respiratory organs. Full-time bed rest will sometimes decrease the amount of sputum produced in only a few days. Occasionally it takes months of rest to show improvement. Patients with cavities in the lungs usually produce sputum for years.

Menstruation.—Young women that are tuberculous sometimes do not menstruate regularly. There may be an absence of only one period or of several periods consecutively. Very rarely tuberculous women have excessive menstruation. A few months' bed rest will often restore normal menstrual function.

Nervous and Mental State.—Large numbers of the tuberculous have a very noticeable change in the nervous and mental state. Of these changes *marked irritability* is the most constant. Small disturbances, such as street noises, the playing of children, or the little worries incident to the daily life, can hardly be endured. The nerves are "on edge," the temper is bad, and the patient often loses his usual agreeability. Women who are tuberculous, are not only frequently irritable, but they also are likely to weep

easily and often. Improvement is noticed in the nervous and mental state soon after the rest cure is begun. Many persons, not knowing they are tuberculous, who have spent months or years in a highly emotional state, become serene philosophers while taking a rest cure. A few patients remain introspective, and have periods of mental depression and imaginary fears for a year or more after apparent recovery has taken place.

Pallor.—In the tuberculous, pallor is due largely to a *lack of sunlight*. The practice of saying it is due to anemia is greatly overworked. Also the practice of giving the patients “shots in the arm to cure the anemia” is as irrational as it is useless. With rest and increased weight, especially if the patient has enough sunlight on his bed, there should be no pallor in early and moderately-advanced cases. Pale patients do not need pink pills; they need sunlight and outdoor life—and if tuberculous, *rest*.

The Strength.—Ease of fatigue is probably the most common symptom of active tuberculosis, at the time the diagnosis is made. Persons in middle life or over, who have had low-grade disease several years, sometimes deny weakness or ease of fatigue. This is because they have been substandard so long that they have established a new standard of normality. When asked how they feel they reply, “Oh, pretty well, *for me.*”

It took the medical profession many centuries to learn the simple fact that a tired person should be rested. Nearly all tuberculous persons feel better when taking rest. Patients who complain about taking the rest cure do so, as a rule, not because they find the rest disagreeable, but because of the length of time involved, a lack of money, or a feeling of responsibility toward their dependents. It is not easy for a working man, who is the sole wage earner in a family, to lie in bed month after month, especially when he looks like a healthy man. The feeling is quite as unpleasant for a woman who is the mother of small children and the wife of a working man. It takes good judgment to do the right thing under the circumstances. But the rest cure makes these patients feel stronger, not that he becomes stronger in a few days or in a few weeks, but because he has had no exercise to use up the little reserve strength he had. He at least does not feel tired.

False Conclusions.—A patient's knowledge of his improvement is cause for encouragement and without this knowledge the future would not be very bright. On the other hand the patient is likely to come to the wrong conclusion, if he does not restrain his optimism, and overestimate the extent and permanence of the gain he has made.

The uninformed patient sometimes thinks he is well again and able to discontinue the rest cure, merely because he has regained his weight, lost

the fever, stopped coughing, and feels quite normal *when at rest*. This is a dangerous part of the journey along the road to recovery, and many are the patients that fall by the wayside. At this time comes the desire to go back to work, at least to work part-time; to go back to school again—part-time study; or go out again socially, if one is taking the rest cure at home. The patient should reject such desires and plans, and stick to the main business of getting well.

A person overcomes tuberculosis by the formation of scars in the disease areas. New-formed scars are very delicate and they break down easily. If the patient does not continue the rest cure until the scars become firm enough to resist the strain of physical activity, they will not hold the disease in check. Most patients cannot afford to waste more months and more money taking a second or third rest cure. It is much safer and more economical to do a good thorough job of getting well when the first rest cure is taken.

CHAPTER IX

CONFLICTS WITH FAMILY AND FRIENDS AND QUACKERY

Tuberculous patients who have taken a part or all of the rest cure at home know the contents of this chapter well. They need not read it for they have had first-hand experience with the subject. Books on tuberculosis are written to teach those that read them the importance of learning tuberculosis in theory, so they can avoid as much actual experience with the disease as possible. The tuberculosis problem will be solved largely in patients' homes and not in sanatoriums, because a large portion of the tuberculous cannot go to a sanatorium on account of lack of money, even if the sanatoriums had capacity to accommodate them. This chapter is only a warning to the patient that is just beginning his rest cure at home. Perhaps good luck and good sense will be on the side of the patient. He might have almost ideal surroundings, in which case the contents of this chapter will appear only as interesting fiction. Because I hear daily the details of patients' battles with the unsolicited advice of the persons that surround them and the visitors that call on them, I believe the old adage, "Forewarned is

forearmed'' applies very aptly to this situation.

The ideal condition for a tuberculous person would be to have the disease diagnosed very early and then go at once to an ideal sanatorium, ideally situated, and be an ideal patient after he arrived there, under the guidance of an ideal physician. But the picture is too beautiful to be true. Things do not happen that way in real life, for there are glaring defects in the experience of ninety-nine out of a hundred cases of tuberculosis. Said briefly, a tuberculous person has to do the best he can with the conditions that surround him and with the advantages he can obtain.

The Family.—To one inexperienced in this work it would appear that a tuberculous person, taking his rest cure at home, should not have disagreeable and harmful conflicts with his family but, unfortunately, that is not the case. These conflicts are usually the result of ignorance rather than a willful desire to injure the patient.

One of the first conflicts occurs when some member of the family—very often a person past middle life—announces with much force and finality that the patient is not tuberculous and proves it, at least to his own satisfaction, by calling attention to the fact that the patient has not had a hemorrhage, has not had night-sweats, does not have "garms in the spittle," and does not look like a consumptive. This self-appointed

Solomon also cites the fact, as further proof, that the patient doesn't look like Henry White, *who died*, George Black, *also dead*, and Maggie Dooley, who is almost ready to die. He finishes his outburst of professional advice by saying he thinks the patient should get up, and get out and go to work.

A younger member of the family, wise beyond his years, comes on the scene to offer his opinion. He knows nothing of tuberculosis, has given it no thought, has not even read a book on the subject, but he has some very positive *wishes* and *hopes* relative to the patient's welfare. He does not know that wishes and hopes are not knowledge of tuberculosis. He knows, that is, he wishes or hopes that the patient does not have tuberculosis and that the substandard health of the patient is due to "being all run down," "bronchitis," "frequent colds that have weakened him" or "poor recovery from some other disease." He is sure that another doctor *could* be found that would say the patient is not tuberculous and, therefore, suggests a little medical shopping. Probably if a number of doctors were consulted, after the manner of holding an election, the doctor that diagnosed the patient as tuberculous would be out-voted. That, of course, would settle the question more favorably in his mind. He strongly insists on his plan.

A third member of the family makes his appearance. He frankly admits that his knowledge

of the diagnosis of tuberculosis is not especially profound and that the doctor who made the diagnosis is probably right. He does not doubt the doctor's diagnosis, but he is very sure that his *treatment* is wrong, for sick people need medicine—need it bad! The doctor has only ordered the patient to bed for complete mental and physical rest, and said something about “Nature healing him by means of a rest cure.” He must speak to the doctor about it and see if the patient should not be given a tonic, some shots in the arm that he has heard called the “se-ri-um” treatment, or perhaps, codliver oil. Now if the doctor would only give the patient a few kinds of medicine—pills, powders, capsules, liquids, and hypodermic injections, this third self-appointed adviser from the family circle would be satisfied.

The last member of the family to be introduced is grandma. This good old soul does not live with the patient but, having heard of this unusual and unbelievable situation, she comes with all haste possible to set things right in the family and to advise them how to handle the matter. She has doubts as to whether the patient is tuberculous because, as she remarks, “We’ve never had it in our family.” But even if convinced the doctor’s diagnosis is right, she is quite sure his treatment is wrong. Heretofore grandma has given much medical advice regarding chilblains, croup, colic, and the merits of

catnip tea, and is not at all baffled by a disease as dangerous as tuberculosis. Her first shot is directed towards the patient's lying in bed twenty-four hours daily. She is sure he will *get weak*; also, she is sure that just lying in bed won't do anybody any good. But slowly it dawns on grandma's mind that no one is taking her advice seriously, so she goes back home where her ministrations are more acceptable, and leaves the patient to follow the advice of the doctor, or not, as he sees fit. *She's through!*

Advice-Giving Friends.—The tuberculous patient and his family frequently have annoying experiences with their friends, whose sympathy and desire to be helpful, exceed their judgment and knowledge. It often requires much tact and, occasionally, some plain, forceful speech, on the part of the family or patient, to rid themselves of these self-appointed, advice-giving pests.

First among those to be considered is Sister Nosey, who is a member of the Visiting Committee from the church. Sister Nosey revels in the discussion of the physical, mental, and moral ills of her community. None escape her, and much practice has made her proficient. On entering the home she states she is surprised to know the patient is sick and, while stating it, sheds a tear. On entering the door of the patient's room she is visibly affected, but very quickly one notes she has become surprisingly cheerful, for the patient *doesn't look sick!* A

bright idea enters Sister Nosey's mind,—*the patient hasn't got tuberculosis!* She had expected to see a living skeleton with a bad cough. At once Sister Nosey has another bright idea. To confirm her opinion, and to get the patient out of trouble and on the right road to health and happiness, she suggests they call Dr. Blank—"Dr. Blank, you know, who belongs to *our* church"—for she is sure the patient's family physician and his consulting specialist are both wrong. Before leaving, she again assures the family that the patient is not tuberculous, and that, if they will only call in Dr. Blank, he will cure the patient in just a few days. Here endeth Sister Nosey's first visit; the family and patient hope it will be her last, also.

The next visitor is neighbor Wiseman, locally known to have an opinion, ready to air, on any subject that could be mentioned. Nothing is more pleasing to neighbor Wiseman than giving advice. He takes pride in having a wide range of knowledge and he does not believe in hiding his light under a bushel. Neighbor Wiseman enters the patient's home with radiant smile and abundant self-conceit. Although not invited, he is quite sure he is needed, and that he will be able to shed much light on a dark and disagreeable subject. Walking into the patient's room he, too, is somewhat surprised, for the patient does not look like a sick person. Neighbor Wiseman has some doubts as to the accuracy of the doctor's

diagnosis, but he carefully conceals them, having been told the diagnosis was made by a doctor widely known as a student of tuberculosis. He cautiously looks about the room to see how many kinds of medicine are being taken, but finds no boxes or bottles in sight and, upon inquiry, is told the patient is taking no medicine. This is cause for more disappointment and he is truly glad that he came in time to set the family right. He thinks the family is to be congratulated on having a neighbor as wise and as thoughtful as he. After clearing his throat, and assuming the proper pose that is supposed to accompany profound wisdom, he asks the patient if he will be leaving soon for the West. With much disappointment he is told the patient is not to leave home, at least, it is thought not to be advisable at the present time. Other inquiries are made, but his questions are either ignored or answered with painful brevity. The atmosphere of the patient's home begins to feel chilly to neighbor Wiseman; he gets cold feet; he feels sure he is not appreciated; and the longer he remains, the more apparent becomes the fact that his advice, at least, is not wanted. He walks home in sorrow, but not because his neighbor is tuberculous.

The next visitor to cause the patient to have a dark brown taste in his mouth was Miss Susan Sobb, who was one of the original Sobb Sisters. Susan loved grief. Next to attending funerals, she liked visiting the sick and afflicted. Her

tears flowed easily and freely, and the manifestation of her sorrow was anything but silent. As soon as Susan heard of our patient's trouble, she came immediately to offer her sympathy. When admitted to the home her chin was quivering, her voice broken, and her tears were near the surface. She delayed not to enter the sick-room where she could relieve her pent-up feelings, and thoughtlessly spread a little gloom. With jerking, tearful sobs she expressed her sorrow, and told of the awfulness of consumption, and how every one she had known, that had it, died of it. After Susan had unburdened her heart of its grief, she tearfully bade the patient "good-bye" and departed for her home. When Susan left, the patient asked the family not to admit any more of the Sobb Sisters to his room.

The patient was soon visited by Brother Wheeze, who has served on the Sick Committee in his lodge for many years. This distinction, conferred on him by the lodge, has given the good old brother many opportunities to call on the sick and afflicted and, *he loves his work*. Brother Wheeze, himself, has been afflicted with asthma for many years and, believing that misery loves company, he finds it a duty and knows it is a great pleasure to him, personally, to recite the endless details of his own ill health. Brother Wheeze likes best, therefore, to call on the sick that are in bed. He is then sure of his

audience, and knows that he need not tell his story hurriedly, for he is quite certain the audience will still be there when he finishes.

He begins by saying, "Now, it was thirty years ago that I first took down with the azmy," and from that remote period on down to the present time, no detail is omitted from his narrative. Yawning and an assumed air of drowsiness and fatigue, on the part of the patient, do not check the story or cut short the visit. Like grandfather's clock, he goes on and on, not stopping until he has run down. The patient is bored and irritated beyond endurance. Personally helpless, he asks the family to spare him additional affliction in the future from Brother Wheeze and others of his kind.

The last pest we shall mention that visited our patient was Winsome Willie, the village cut-up. Willie is still very young and quite inexperienced in the serious affairs of life, and what he lacks in knowledge he makes up in boldness. Willie breezed in and told with much glibness the news of his social life, and how the patient was missed by all his friends. He insisted that the patient should attend their next party, and said they were to have lots of good times the coming months. "Yes, the patient must be there" said Willie, and continued, "You should get out and get some exercise, and shake off all this trouble." The next day the patient, for the first time, asked the doctor if it would hurt him to get out and

take a little ride. One statement from the doctor answered the question and discouraged similar questions for weeks to come. This time, it was the doctor that requested the family to exclude Winsome Willie, and others of his tribe, from the patient's home.

And last there came as visitor, a little woman of the neighborhood that we shall let the reader name. She was seen to come at an opportune time, neither too early nor too late. She carried carefully on one arm a fairly large package, wrapped loosely with a piece of newspaper. On entering the home, she inquired cheerfully about the family and, without emotion or undue curiosity, she asked specially about the patient, and was told that he was doing well. She quietly removed the newspaper from the article she had carried so carefully, and one saw that it was a beautiful red geranium in a flower-pot. It was for the patient. The woman had no money with which to buy cut-flowers or any other gift, but the little red geranium which she had raised in her own home served the purpose far better. Modestly she handed the blooming plant to a member of the family, sent a brief, cheerful message to the patient, and left.

A thrill of joy was felt by the patient when the little geranium was placed in his room, and from that time on, he brought in one more beautiful character to reside in his air castles as he built them from day to day. In his daydreams he

provided her with flowers—many, many, beautiful flowers—and he watched her with keenest delight as she went about among them. And now and then he would see her take one away, he knew not where she went, but he knew someone would be made happy.

The Conflict with Quackery.—The tuberculous patient that has competent medical service, beginning at the time the disease is first suspected in him in its earliest stage, and continuing until the time he is safely healed, is truly fortunate. He is the exception and not the rule. The responsibility of having competent medical service rests largely upon two persons, namely, the patient, himself, and a doctor.

A *quack* is a pretender—someone that claims knowledge and skill that he does not have. *Quackery* is ignorant or fraudulent practice. At this time, here in America, definite knowledge on tuberculosis, simply and clearly expressed, is available in books written for lay persons. Anyone who can read simple English has no reasonable excuse for not knowing enough about tuberculosis to prevent his being a victim of quackery.

Causes of Quackery.—There are many causes of quackery and all do not apply to the same quack. Probably the principal cause is a desire on the part of an unscrupulous person to get money more easily than he can get it honestly. The quack, also, is fond of assuming a title. It pleases his vanity and egotism to be called

“Doctor.” To be Bill Smith, the barber, in March and Doctor William Smith, adjuster of backbones, the following December is, in Bill’s mind, a considerable step toward social prominence. An old be-whiskered, long-haired charlatan that pretends to cure all the physical and mental ills of mankind by means of his “personal magnetism” and his “magnetic fluid” is greatly pleased to be addressed as “Doctor;” besides, he likes the cash. A neurotic old dame with gentle voice and affectionate touch, that recites her shop-worn prattle to other persons having mental kinks and physical ailments, glows with pride when her victim calls her “a wonderful doctor.” Also, after she has told her dupe that he has “only an error in his mortal mind,” and that he will be all right, if he will only believe that “G-a-w-d is love,” she joyfully takes the *honorarium*, or, more plainly—she pockets the kale.

There have always been quacks, charlatans, impostors, and humbugs living off the fears and ignorance of men and women who are physically or mentally afflicted. Healing cults come and go; quackery, of various kinds, comes and goes; and the same is true of extensively advertised patent medicines. Like the chameleon and tree-toad, these impostors change their color from year to year, but their prey is ever the same. The man that will buy patent medicine will patronize a quack; the man that calls a drug store clerk

“Doctor,” when he speaks to him, will call a backbone adjuster “Doctor.”

Patrons of quackery appear to have no power of discrimination; they have more faith than judgment; they are always looking for something *new* in the healing art. Quackery continues because people are born into the world, and so reared that they do not know any better than to patronize it. Barnum said—“There’s one born every minute.” *And some of them live.*

Burned Fingers.—The tuberculous who have been victims of quackery, or of incompetent medical service from an ethical, reputable physician, usually turn loose an awful wail about it that reminds one of a child that has burned its fingers on a hot stove. Their experience hurts them—hurts the pride they had in their own poor judgment. Yet, they take none of the responsibility on themselves. They often give vent to their feelings in the most picturesque profanity and choicest billingsgate. They regret the loss of hard-earned money, the willful deception of the quack, and the ignorance or carelessness of the physician.

As they learn more of tuberculosis, and the importance of having it diagnosed and treated early, their experience is not easily forgotten. Not infrequently they and their families continue the outbursts of invective for years, if they live that long. When not expressing regret because of their unhappy experience, they repeat

over and over some of the following statements: "He just wanted my money," "He's a crook," and "I didn't even dream I had tuberculosis." Then, turning their attention to the glowing promises given them as a "come-on," they recite their experience with "adjustments," Electronic Reactions, electrical treatments, prayers, magnetic treatments, "se-ri-ums," tonics, cough syrups, pepsin, bromides, surgical operations, poor recovery from this, and poor recovery from that, etc., etc., until one who listens to these lamentations frequently, grows weary of their recital.

It comes to the mind of doctors, daily, that lay persons must take on enough forethought and knowledge of Who's Who in the medical profession, and What's What in medical procedure, to protect themselves against preventable disease, invalidism, quackery, and professional incompetency. Patronizing quackery and then "cussing it out" is not the solution of the problem. Lamenting over and over that one did not know enough about the evidences of beginning tuberculosis to suspect it in himself, until he became an incurable invalid, is about as sensible as not knowing enough to carry fire insurance on one's home because it had not burned down—yet. Being an invalid from tuberculosis is far more deplorable, and occurs much more often, than losing one's home by fire. *Knowledge* of tuberculosis and of competent medical service is one's

protection—one's insurance—against quackery. It cannot be bought; *it must be learned*. It is the only safe way to keep from burning one's fingers.

Quacks' Solicitors.—Tuberculosis patients tell interesting stories of their experiences with quacks' solicitors. As soon as the patients' condition becomes known the trap is set for them, and very sly and shrewd efforts are made to get them into the hands of charlatans. The first bait thrown out is a story of some miraculous cures the quack has accomplished. These cures are said to have been made by a new method, some secret process, known only to the quack and others of his kind. The quack's secret and mysterious "treatments" are recommended by the solicitor as being a *sure cure* for tuberculosis. They are claimed to be not only sure, but *speedy*. The patient is told that the long period of bed rest ordered by his regular medical attendant will not be necessary, and that all he needs to do is to take the quack's treatments. The quack will do the rest,—if the money is available. Sick persons like doctors that will make them glowing promises, and charlatans have no scruples against this practice. They believe in "making hay while the sun shines."

The patient is informed by the solicitor that the quack's usual charge for these wonderful treatments is a certain number of dollars the month, but he thinks he can get the patient a reduced price. (This is "come-on" Number 2.)

The solicitor is eager to call up "the doctor," (perhaps at one time the solicitor's barber or iceman) and make arrangements. This done, all is ready. The patient has nothing to do but get the money. Later, he will get the "adjustments," Electronic Reactions, magnetic treatments, hypodermic injections called "se-ri-ums," electric treatments, prayers, Balm of Gilead, pills, powders, or capsules—at least as long as the money lasts. Later still, he can be assured the opportunity of pouring forth chapters of verbal venom against quacks and quackery. And yet—*strange thing*—the patient assumes no responsibility for his deplorable experience.

Getting on the Right Track.—Enough has been said about quackery, cults, and incompetent medical service to warn the patient against patronizing them. But there is another question that comes at once to the patient's mind. That question is, "How is one to get on the right track to secure competent medical service, after he or his family physician has suspected tuberculosis as the cause of his substandard health?" In the large cities the problem is easily solved, but that is not the case with persons living in small towns or out in the country, far away from the larger cities.

Without asking permission of my colleagues to say this, I suggest that such persons, both patient and doctor, write to the superintendent of the state tuberculosis sanatorium or to the med-

ical director of *any* private tuberculosis sanatorium in the state in which they reside, for the desired information. These doctors will be glad to start them on the right track. The superintendent of the state sanatorium, in every state, knows Who's Who in tuberculosis work in his state. He has a good opportunity to see the deplorable results of lay and professional ignorance of tuberculosis, and he is always willing to lend a helping hand.

CHAPTER X

THE OUTLOOK

During the time a patient is taking the rest cure there come to his mind some questions relative to his future. Three of these questions are: "Am I likely to have the disease again?", "What can I do to avoid having it again?", "Will I be able to live a useful life?". It is hard enough to forecast the future of a normal, healthy person; harder, yet, to say what will happen or not happen to one who has been tuberculous. But let us see what the observation of tuberculous patients over years of time teaches us to expect concerning their outlook.

Causes of Failure.—Very few persons can afford to have tuberculosis once; fewer still, can afford it twice. To prevent a return of the disease is one of the principal purposes of the doctor's teaching and training. The doctor learns the causes of failure both in theory and in practice. He sees arrested cases fail and have active disease again. In this way he learns the cause of failure.

Tuberculous patients should learn the causes of failure *in theory*, so they will be able to avoid actual failure. Most failures are due to ignorance or to carelessness. The patients are poorly informed; they have read nothing; they have

had no teaching by a tuberculosis specialist; they face the future blindly; ignorance leads to carelessness, and their welfare is in the hands of fate.

One outstanding cause of failure is, that the patient did not rest long enough. Nature heals tuberculosis by the formation of fibrous scars or little limey knots, called *tubercles*, in and around the diseased areas. These scars and tubercles imprison the germs and heal the disease. If the scars are not old enough and firm enough to resist physical strain, they will break down when the patient begins to take exercise or to work again. The older the scar, the firmer it is.

Sudden and unusual physical strain will sometimes break down a scar and cause renewed activity of the disease. I have seen hemorrhage caused by the strain of cranking a motor car, by lifting a fifty pound cake of ice and placing it into a refrigerator, and by a three-hour period of hiccoughs. It is logical to believe that if severe physical strain can cause hemorrhage, it can cause the disease to become active when there is no hemorrhage. Tuberculous persons with active disease, or recently arrested disease, should avoid lifting heavy weights, cranking motor cars, swimming, tennis, singing, or anything else that is likely to break down their scars. "Better be safe than sorry" should be their rule of conduct.

Acute respiratory disease—pneumonia or influenza—will sometimes cause an inactive case to become active. The history of poor recovery from acute respiratory disease is very common in patients diagnosed as tuberculous for the first time. A person who has been tuberculous cannot avoid these acute diseases, but he can remain a full-time rest patient after the disease is over, and in that way prevent active tuberculosis from following it. Better spend a month or two in bed after a case of pneumonia or influenza, than run the risk of spending several months there recovering from tuberculosis.

A woman with low-grade activity usually gains weight and overcomes the disease during a pregnancy. Her general condition is noticeably improved. But as soon as her baby is born, especially if she nurses it, the disease may light up again with marked activity. From the standpoint of her own personal welfare she should not nurse her baby, and she should remain a full-time rest patient for a month or two after the baby's birth. Whether it will be necessary for her to take the risk of nursing the baby must be judged by her medical attendant at that time. A tuberculous woman, or one that has been tuberculous recently, should avoid pregnancy until safely healed. What is meant by "safely healed" will have to be judged carefully and conservatively by a competent physician.

One sees cases of tuberculosis in which the

histories show no cause for the disease other than overwork and a corresponding lack of rest. They are found often in persons having occupations where the hours are long, the work hard, and the wages small. Often women, so employed, state that they do their housework after they return from their places of employment, and frequently sew and mend until midnight. They diagnose their own cases as "overwork" or "I am all run down and need a tonic." Knowing the cause of the original breakdown, it would be unwise to attempt the same work after recovery from the disease.

In this southwestern country we diagnose tuberculous patients whose histories indicate that they began to fail during, or at the close of, a long hot summer. We can find no cause for their becoming tuberculous, other than the lowered resistance due to the length and severity of the hot season. It would be well if the tuberculous who do not stand the heat well, could spend their summers in a cool climate. For these people a long summer vacation is often a life-saver.

There is much difference in the natural resistance to tuberculosis in different persons and, to a limited extent, in races. A tuberculous pneumonia may cause death in three weeks. I have seen one man, who has had active tuberculosis continuously for twenty-eight years, and he is still living and working. Add to this the fact

that examination of the chest shows that large numbers of persons have been tuberculous and have recovered from it, without having known they were tuberculous, and it is apparent that a doctor with wide experience in tuberculosis work, is reluctant to express a definite opinion as to a patient's outlook.

Much also depends upon the amount of disease the patient has or has had, his manner of living, his employment, his knowledge of the disease, his age, his responsibilities, his luck, and a score of other things, some of which are under his control, and some are not. As a rule, the outlook is better in closed cases than in open cases; it is better in cases that have not had hemorrhage than in those that have had hemorrhage; with the same amount of disease, the outlook is better in a patient of forty than in a patient of twenty; it is better in a patient that earns his living with his head, than in one who earns his living with his hands; it is better in a patient who believes and practices "Safety first," than in one who believes in "taking a chance."

Employment.—The thought of one's earning capacity and general usefulness after recovery, comes often to the patient while taking a rest cure. In many cases it is a difficult problem, especially in men who are manual laborers. They have been taught by their medical attendant while taking the rest cure, that they should avoid physical strain for two or three years. Before

becoming tuberculous they did work that required strength and endurance; they plowed, planted, and reaped; they planned, sawed, hammered, and built; they lifted and carried; they were a part of the world that works.

To change occupations is not always easy. A trade is not learned in a day, nor in a year,—nor while lying in bed recovering from tuberculosis. The patient can make plans and schemes but,

“The best-laid schemes o’ mice and men
Gang aft a-gley
And leave us nought but grief and pain
For promised joy.”

The public is usually sympathetic toward persons who have been tuberculous, but frequently does no more than to express sympathy. Men and women are sometimes heartlessly refused employment after recovery from the disease. This evil is not so bad as it once was for the public is better informed, therefore, less afraid. Knowledge brings responsibility and a personal feeling of duty. It is a *duty* of the employing public, to employ men and women who have been tuberculous and are again ready to work. There is no danger to other employes. It is a well-known fact among tuberculosis workers, that it is not the person who knows he is tuberculous or has recovered from it, that is a menace to others, but the person that is tuberculous *and does not know it*. After a person has recovered from tu-

berculosis, he is as safe as he was before he had the disease. Among cases of active tuberculosis it is only the *open case* that is infectious.

Many tuberculous persons and those who have been tuberculous are keenly alert to suspect the disease in others who are undiagnosed, and try to get them started on the right track. Also, it has been my pleasure to see men and women who have been tuberculous instrumental in finding employment for others of their kind. What these ex-patients need and want, is not sympathy, but *suitable employment*. This is one phase of tuberculosis work, teaching, and propaganda, that has been much neglected. We shall not look to publicity seekers, flag-flapping patriots, sob-sisters, and professional uplifters to do this work. We shall look to the men and women who are thoughtful, silent, and tactful; who do good deeds instead of merely talking about doing them; who shun publicity, alike, for their own good acts and for the defects of others.

Avoiding Responsibility.—Many persons are poorly supplied with prudential forethought. They live from hand to mouth; they spend lavishly in one season and are in poverty the next; they appear to be without thrift and economy; they assume responsibilities blindly. As long as they are in good health and have earning capacity they are apparently happy, although their creditors are often unhappy.

Some of the tuberculous are of this type. They do not know how to avoid trouble; they do not know the difference between necessities and luxuries. One sees them, almost penniless in August, buying motor cars on credit in December. I have seen a poor wretch lying on his deathbed, fed, clothed, and sheltered by a relative, yet begging for medical consent to marry. I have seen scores of them in a deplorable state physically and financially, marrying without the formality of asking medical advice. It is often a case of poverty begetting more poverty that must be supported by relatives, volunteer charity, and the tax-paying public. This utter lack of judgment and good sense frequently seen among the tuberculous sometimes turns individual persons against them. Men and women who have something to give prefer giving it to those who are trying sensibly and sincerely to help themselves. They want the persons they are helping to become and to remain self-supporting.

A person who has been tuberculous should use every precaution possible to avoid a recurrence of the disease. He should avoid unnecessary obligations and responsibilities. He should consider the rights and feelings of relatives, friends, and taxpayers—especially the relatives; for the sacrifices made by a tuberculous patient's family, stand out as one of the most glowing examples of personal affection and duty.

The Patient's Age.—Tuberculosis may be found in human beings of all ages, but when one sees these patients daily, year after year, he notices that the disease is likely to develop more rapidly at certain periods in life, and that like evidences of disease are more serious at one age than another. For example: The young adult, the person of eighteen or twenty, that is an open case, has a very serious outlook even with the very best of care; while on the other hand, one sees persons of fifty years and over that go about their daily duties, month after month, and even year after year, spitting out millions of tuberculosis germs, daily, and speak of their disease complacently as “bronchitis.”

Not so with the young adult. Tuberculosis often spreads rapidly in him, and between the ages of eighteen and twenty-eight, the slightest amount of active disease should have the most rigid care. If the diagnosis and treatment are delayed, in the young adult, until a “neighborhood” diagnosis is made, the patient is very likely to remain a chronic invalid or die of tuberculosis. The later the diagnosis, the poorer the outlook.

Off Duty.—After recovery and return to work there are troubles of a different kind. The restrictions of the rest cure, especially when taken in a sanatorium, have broken the patient's social contacts. Shall he begin again the same social activities he had before becoming tuberculous, or

shall he avoid them? His outlook often depends upon his answer to these questions. Very frequently it is not his daily work, but what he does when not at work, that brings the disease back to activity.

He has time enough to rest and keep well, but he does not do it.

He knows that he should avoid physical strain, but he does not do it.

He knows that "early to bed" should be his practice, seven nights a week for two or three years, but he does not do it.

He knows that he should avoid physical, financial, and social responsibilities and obligations, *when possible*, but he does not do it.

He knows that to avoid fatigue is one of his most important duties, but he does not do it.

He knows that he should sleep in air as fresh as that out-of-doors, whether it be in a room with windows and door open, on a sleeping porch, in a tent, or under a tree, but he does not do it.

He knows that he should follow what he has been taught by competent doctors, instead of following the advice—often more pleasant—of his friends, but he does not do it.

He knows that his happiest hours are spent in sleep, but he regrets them.

He fails very often, not because of ignorance, *but because of carelessness.*

Growing Old Early in Life.—One meets from time to time a man of out-standing merit and ability who is described as having “grown old early in life.” He does not have the same pastimes, the same kind of social life, the same amusements, that other men of his age have; yet, he is happy, honored, respected, and successful. Frequently this type of man has a history of having had unusual responsibilities thrust upon him very early in life. Sometimes the responsibility was financial; that is, as a boy he had to support himself, and even contribute to the support of his family. His daily life was a struggle for simple necessities.

Other men of this type have a physical defect. Their history is often unknown to all but their most intimate friends. Outwardly they usually appear healthy; to some they appear lazy; to the doctor that knows them, they appear sensible. Some of them have been tuberculous; they live restricted lives; this gives them time for reading, for meditation, and for improvement. They have turned defeat into victory; sometimes they have succeeded in life—not in spite of a physical defect, but because of it. Growing old early in life is a characteristic of the tuberculous person that has succeeded. He is a good philosopher; he does not complain, nor does he seek sympathy; he develops resourcefulness. To him, it is not a hardship but a pleasure, to be alone.

After recovery from the disease, the outlook is very much the same as it was before one became tuberculous. Many of these persons succeed in a worthy work, while others fail; probably some of the latter would have been failures in life anyway, whether tuberculous or not.

Mental Changes.—Contact with the tuberculous, year after year, shows mental changes in many of them regardless of their age, sex, or financial condition. The most common change is irritability of temper. The change is usually noticed both by the patient and by his family, before its cause is known. Disagreeable noises, slight disappointments, unexpected tasks or duty—the little vexations of the day, that were not noticed, at least so conspicuously, before the onset of the disease—are likely to cause an outburst of temper, manifested by harsh words, biting sarcasm, profanity in men, and tears in women. In those who recover from the disease, the normal mental condition returns early, although some patients remain introspective and “neurasthenic” for a year or two after they are apparently well, physically.

Some of the most trying experiences that families have to undergo are found in the care of tuberculous men past forty-five or fifty years of age, who are in their last illness. Often the family thinks the patient is “possessed of a devil,” and their daily experience seems to justify the thought. It is a matter of consolation

to the family to know that their experience, while extremely disagreeable, is fairly common.

Periodic Examinations.—After recovery takes place, whether the rest cure was taken in a sanatorium or at home, the former patient should have a thorough examination, periodically, by a tuberculosis specialist. The results of the examination should be written on a diagnostic form or card for future reference and comparison. For patients that can afford it, the examinations should be made every three months during the first year after recovery, and every six months during the second and third years. If there is no evidence of the return of the disease after the end of the third year, one examination, annually, will be sufficient. Women who have been tuberculous should take the examination about one week *after* the menstrual period. Nearly all well trained persons will be able to suspect a return of the disease by their *feelings* before it has made much progress. Experience has been a dear teacher to them; they know the dangers of delay.

Family Influence.—To far greater extent than is generally known, the influence of the family controls the outlook of the patient. There is no other serious disease that afflicts mankind, about which so many lay persons feel competent to give advice, as about tuberculosis. They not only feel competent, they feel it their duty to give advice, whether invited to do so or not.

For this reason many tuberculous persons, unless they enter a sanatorium immediately after the diagnosis is made, follow the orders of their medical attendant with difficulty, or not at all.

Nearly all cases of tuberculosis, except late-stage consumptives, are diagnosed in doctors' offices. After the patient is diagnosed he goes home and announces the disagreeable news to the family; then business begins in dead earnest and the battle is on. The news spreads, and as it spreads the advice-givers appear. Relatives, friends, acquaintances; the butcher, the baker, the candlestick maker, all air their opinions. If the patient does not look like a dying consumptive, the advice-givers tell him with great assurance that he is not tuberculous, but that he is "just a little run down," has "bronchitis," has "malaria," "needs a tonic," "hasn't got over the flu," "is overworked," etc. The patient is urgently advised to go to Dr. Blank for "he's good on broken legs, babies, sore eyes, colds, and chest complaints." They are quite sure Dr. Blank will tell him he does not have tuberculosis.

It takes a well-balanced patient and a sensible family to withstand such an onslaught of advice, especially when the seriousness of the condition leads them to wish the doctor's diagnosis were wrong. These self-appointed medical advisers mean well. They are often the family's best friends; they want to help; but, unfortunately,

their zeal exceeds their knowledge and discretion.

The first month is the hardest. During that time temperature and pulse records have been made, the doctor has given the patient some detailed instruction, and much valuable information has been learned by reading some layman's books on the subject. It is well that other members of the family read the books, too, so they will have a general knowledge of their duty. Whether the patient goes to a sanatorium or not, he will find it profitable to buy a half-dozen layman's books on tuberculosis. Any tuberculosis specialist can tell him the names, authors, publishers, and prices of the books. The average price is less than two dollars each, and the cost is money well spent. Persons not accustomed to reading and buying books, sometimes think it rank extravagance to spend money in that way. They can afford a motor car and its up-keep, movies, and dozens of other unnecessary expenditures, but cannot afford to prevent invalidism and all its attendant evils in a tuberculous patient. In sickness, as in health, many persons like to make a great display of their expenditures. One sees them spending two or three thousand dollars sending a late-stage consumptive to a health resort to die, but too economical to have competent medical service at the onset of the disease, when the patient could have been returned to normal health.

How Long Tuberculous?—There comes to the mind of the patient soon after the diagnosis is made the question,—“How long have I been tuberculous?” That question comes also to the doctor’s mind, for upon its answer depends, in part, the patient’s outlook. One need not go over again, at this place, the evidences of beginning tuberculosis, that subject having been considered in detail in Chapters I and II. The patient will ask himself some questions: How long have I been in substandard health? How long have I *felt* tuberculous? Have I had poor recovery from something—and its date? Have I felt this way for a period as long as three or four months—years before? Was I tuberculous then? Have I had a simple pleurisy and, if so, when? Any tuberculous person who has read Chapters I and II of this book should be able to tell with reasonable accuracy how long he has been tuberculous.

The interpretation of this information to help determine the outlook is more difficult. If the patient has had no other chronic disease, but has had substandard health most of the time for several years, and is still able to carry on, he may logically conclude that he has been tuberculous for years. He may also conclude that he has good resistance to the disease, and that Nature has probably formed much fibrosis in the lungs. On the contrary, if he has had good health up to six months or a year previous to

the diagnosis, but has had a hemorrhage or had tuberculosis germs in the sputum when diagnosed, it is very likely that he has been tuberculous less than a year, and that he *does not* have good resistance to the disease. This last condition shows that the lung tissue breaks down easily, and that fibrous scars are *not* formed readily.

Unfavorable Conditions.—Advanced cases of tuberculosis usually live longer than the most conservative well-informed doctor thinks they will. This is especially true of patients over forty years of age. But there are several reasons why the family and family physician should know when the patient is in his last illness. If for no other reason than that of avoiding unnecessary expense it is well that they know some of the more common evidences of what are called “hopeless cases.”

When a patient has lost one-third of his normal weight, he is usually in his last illness; that is, a person who normally weighed 120 pounds would be considered a hopeless case, if his weight went down to 80 pounds. The weight should be known accurately and not guessed at.

Involvement of all lobes of both lungs is nearly always a fatal case.

Involvement of all lobes of one lung and the upper lobe of the other lung is *usually* a fatal case.

The onset of a diarrhea lasting two weeks or

over, in a case with considerable involvement usually classifies it as hopeless.

Tuberculous meningitis usually causes death in from one to three weeks.

Enough detail has been given to call the reader's attention to the subject. One case is cited for the purpose of illustration:

I was called to a railroad station to see a tuberculous patient passing through the city to a health resort farther West. The patient was a young man of twenty-three years, greatly emaciated, a late-stage, bedridden, consumptive with *tuberculous meningitis*. The patient was accompanied by a graduate nurse, his parents, and an uncle. The parents were persons of small financial means. In no sense could they afford such useless waste of money, merely to take their son a distance of a thousand miles to have him die in a health resort. They stated they were making the trip at the suggestion of the family physician.

Several cases have come under my observation where patients have been sent hundreds of miles on money obtained by mortgaging or selling the family's home, only to die a few hours or a few days after arriving there. It frequently appears as if the family wants to make some unusual sacrifice to atone for their ignorance, the ignorance or carelessness of the patient, or the incompetency of a doctor during the early curable stage of the disease. It cannot be

repeated too often, too plainly, or too forcibly, that the outlook of the tuberculous patient, especially the young adult, depends largely upon what is done during the *first six months* of the disease.

Professional Patchwork. — Good tuberculosis work, as now taught and practiced, is a development—a growth covering centuries of time. During most of this time the attitude toward the disease and the outlook of a tuberculous patient was frankly fatalistic, that is, the patient, his family, and his medical attendant thought there was little or nothing to do about it, except to wait for the end to come. The most that was expected, up to fifty years ago, was that the patient could be patched up a little. We still hear the same expression used by old persons and by old chronic cases.

There will be patchwork going on among the tuberculous for years to come, but it decreases from year to year as the public and doctors become better informed. As progress is made, patients are able to set their own standards and control their own outlook. At this time they have far better advantages for knowing and doing the right thing at the right time, than patients had twenty-five years ago. Patchwork is not advocated by physicians, well-informed in tuberculosis work. They have to do more or less of it for they see many patients that have so much disease, there is nothing else to do except to try to patch them up a little. Early diagnosis

and a thorough rest cure prevent patchwork in after years.

The General Outlook.—It is of interest to the tuberculous patient and to his family to know that the outlook for the tuberculosis problem, as a whole, is very good. In America, the death rate has decreased one-half since 1900. Also, since that time, the number of sanatorium beds for the tuberculous has increased from 6,000 to 66,000, and the number of public health nurses has increased from one nurse in 1903 to 3,500 in 1925, that are doing some special work in tuberculosis (Strawson). The statisticians tell us, encouragingly, that in fifty years more, tuberculosis, in America, will be almost eradicated.

CHAPTER XI

TUBERCULOSIS AND POVERTY

A man in good health and with comfortable income does not think of tuberculosis as one of the leading causes of poverty. His knowledge of the subject is very meager because he has had little contact with large numbers of very poor people. But doctors, more especially tuberculosis specialists, public health nurses, and social service workers, who deal with the tuberculous daily, have very different experience and more information; they are in a position to know some interesting facts.

Free Clinics.—One of the best ways to learn the details of poverty caused by tuberculosis, is to hold a free clinic for the poor, year after year. In this place is to be found all sorts and conditions of men; the poor, the ignorant, the superstitious, the well educated, the mis-fits, the ne'er-do-wells, and the victims of professional ignorance. Nearly all the adults seen in free clinics were self-supporting and self-respecting men and women before they became tuberculous. There is much similiarity in the personal histories of these unfortunate men and women. Let us review some of the most common his-

tories and experiences of these patients in poverty, in the hope that it may prevent others from following in their footsteps.

Changing Occupations.—The first evidence of disease in nearly every grown person that is tuberculous is *ease of fatigue*. If the man works inside he thinks it is because of inside work that he does not feel just right, therefore, he quits the job to get one outside. Outside work usually requires more physical strength than inside work, hence, he notices no improvement. The next move is to quit the first outside job to get another. This is repeated until he earns a very small wage, or has no employment of any kind. The disease continues active, often increasing in extent while he is trying different kinds of employment, or has no employment, until finally he has spent his savings, if he had any, in addition to his current wages. He is no longer able to work. The disease has become so far advanced that he looks like a consumptive. His family and friends suspect him as tuberculous; they make what doctors call a “neighborhood” diagnosis and urge him to go to the free clinic to have their diagnosis confirmed. Sometimes he is sent to the clinic by a visiting nurse or by another physician. There he has the facts made known to him for the first time. Another charity case has been made for the taxpayers or volunteer charity organizations to support.

The Traveler.—There comes to the free clinic or the tuberculosis specialist's office frequently a type of patient that we call the "traveler." From some one, layman or poorly informed physician, he has got the age-old fallacy that, as soon as diagnosed, a tuberculous person should go somewhere. Usually, in America, the idea is to go out West. Often this poor wretch states that he was urged to leave home within twenty-four hours after the diagnosis was made, although the history and physical examination show that he has been tuberculous from one to several years.

He borrows a few dollars, if he has none accumulated, and starts for the great out West, the glorious golden West, where health is contagious, climate does miracles, and money is apparently not needed. But after arriving in the great out West, he soon begins to learn some disagreeable facts. He learns that food and shelter cost money in the West, as they do in the Middle-West, or East, or South. He learns from the doctor in the free clinic, that it is not climate but *bed rest*, twenty-four hours daily, that cures tuberculosis. He learns that the story he has heard about tuberculosis patients going out West on a litter, getting well and flourishing as the green bay tree ever after, has another chapter not so well known. This other chapter sets forth the disagreeable fact, that there have been many thousands of patients—over one-half

of the total number—that have gone out West, that did not get well. He learns when his money is almost gone that employment is hard to get. He learns that the climate does not do miracles, and that he is not strong enough to work, even if he could get work to do. He learns that the men and women living in and around tuberculosis resorts have generous hearts, that they often give “till it hurts,” as in war days, but that their resources for giving are limited. He learns that in some of the larger resorts, the tuberculous poor frequently walk the streets begging for food. He learns, after his money has been spent, uselessly, that he should have remained at home. He is in poverty in a strange land.

Victims of Quackery.—Mentally there is a striking similarity among patrons of quackery, although there is much variation in their financial condition, social veneer, and educational advantages. The tuberculous are especially prone to be victims of quacks and charlatans. There are several reasons for this that are very apparent to one who knows the tuberculous.

Ethical, reputable doctors, who are well-informed on the subject of tuberculosis, do not make promises of speedy and miraculous cures; but, patrons of quackery want promises. At this time there is little *treatment* for a tuberculous person in addition to the rest cure and the doctor is largely the patient's teacher. But the quack

knows nothing to teach, for he does not know tuberculosis. He does know, however, that his type of patron *likes to be treated*. The quack's patron must be "adjusted," must have the Electronic Reactions of Abrams, must be given a medicine with a hypodermic syringe—"se-ri-um," he calls it—, must take "electric treatments," or must buy some prayers to rid himself of an error he has in his mortal mind.

All forms of medical quackery have three things in common: a greed for money on the part of the quack; glowing promises of cures to be done by mysterious means, and a victim—a patient *with a fear*. Quackery delays the right diagnosis, postpones rational and effective treatment, causes invalidism, robs its victims of money, and is an important cause of poverty in the tuberculous and in their families.

Medical Shoppers.—The tuberculous person who gets the least sympathy from competent doctors is the medical shopper. This socially stupid and mentally dull creature seems never to get anything settled—*for sure*. When he meets a doctor—any doctor—he seeks to get new light on his old trouble. It matters not where the meeting takes place, at church or theatre, on country highway or crowded city street, at prayer meeting or a dog-fight, at a ball game or a wedding, it is ever the same—he must tell his tale of woe and ask the usual questions as to the cause and cure of his ailments.

If he is fortunate enough to have the diagnosis made in the early stage, he will not believe it because he does not look like a consumptive. He must go a-shopping and get a doctor to tell him he has "just a little bronchial trouble," or that he is "all run down and needs a tonic," or perhaps, in the South, that he has "malaria." He consults more doctors and lay persons from time to time, gets the same or different diagnoses, and eventually arrives at the "some say" stage. "Some say I have tuberculosis and some say I haven't," he remarks.

Untreated tuberculosis frequently heals and spreads alternately, so the patient describes himself as having his ups-and-downs. In many cases the general trend, as the years go by, is downward. The patient grows progressively weaker, changes employment or place of residence, loses his earning capacity, and finally lands in a free clinic or charity hospital. Even when in this unhappy social, economic, and physical condition, the medical shopper asks the same questions that he asked years before, and has the same doubts as to the cause of his ill health.

The medical shopper is the type of man that cannot face disagreeable facts. He never learns Who's Who in medicine. To him an opinion from his barber or his grandmother has the same value as an opinion from the best informed physician. He thinks that repeating statements about what "they say" and "some say," is all

that is necessary. He is apparently unable to learn *that something must be done* to recover from tuberculosis, and that merely talking about it has no value. His inability to make a decision and to do what he is told to do, has brought him to poverty.

Dying to Prove It.—This type of patient is a victim of two evils—tuberculosis and pernicious advice about it. He has too many advice-giving relatives. Someone, usually a parent or grandparent, has more influence with the patient than his medical attendant has. Many elderly persons still believe that tuberculosis is a single sickness disease that always ends in death, and that if a person diagnosed as tuberculous does not die of the disease, he did not have it. They are fatalists of the worst kind. They do not know the evidences of beginning disease, therefore, they cannot suspect it or recognize it until far advanced.

At first, they are positive the patient is not tuberculous because he does not look like a dying consumptive or, perhaps, has not had a hemorrhage. Later, when the disease is far advanced and fills their requirements as to what a tuberculous patient should look like, they change suddenly and, being fatalists, announce with apparent satisfaction that there is nothing to do about it. The fact that the patient was a useless invalid during the last months or years of his life, and died in poverty because of their

ignorant advice, means very little to them. One thing ran true to form—the patient died and thereby proved he had tuberculosis. Nothing matters to a fatalist, and he does not count the cost when somebody else is paying the bill.

Family Poverty.—A duty, which is also a pleasure to the physician who deals with the tuberculous, is to prevent economic hardship or poverty in the family of the patient. Most of the families of the tuberculous must practice economy, and frequently, very rigid economy.

Often when a person is diagnosed as tuberculous the family wants to do something unusual in spending money on the patient's recovery. They suggest selling the home, placing a mortgage on the home, or borrowing from friend, relative, or bank, to obtain money to do an impractical or unnecessary thing. They not only suggest it, but actually do it, if some one with more experience and forethought does not show them a better way. This thought of spending more money than they can afford, together with the expense actually required, makes it necessary for the physician to bring up the subject of expense and economy, at the time the diagnosis is made. He must insist on the family's living within its income. He must advise against the family's desire to leave such employment as its members have, and move to some other state where they may become objects of charity. He must encourage the wage earners in the family

to keep employed. He must keep the expenses of the patient within the family's ability to pay.

The doctor should diagnose, or have the disease diagnosed, sufficiently early that the patient may be accepted at the state sanatorium, should he care to go there. When professional incompetency prevents a person from taking advantage of the opportunity to enter a tax-supported sanatorium *as an incipient case*, it is more than a slight personal injustice to the patient; it is likely to be the definite cause of unnecessary invalidism, poverty, and untimely death. It is, in a sense, a thwarting of public justice. The state and taxpayers provide these institutions for the care of the sick, but—even today—many doctors are asleep on the job and do not wake up, until the disease is so far advanced that the patients are denied admission to an institution that they and their neighbors are paying taxes to support.

Poverty comes from the expense of getting well and from invalidism that diminishes the patient's earning capacity. Poverty in the family of the tuberculous, is often the result of bad management on the part of the doctor or the family itself. Unless it is the wage earner that is sick, there should be very little poverty in a tuberculous family, if the expenses are properly managed.

Prevention of Poverty.—The prevention of poverty in the individual tuberculous patient

and his family is largely a matter of education of both the lay people and the physicians. It will be necessary to teach over and over some very simple facts that are now known by a relatively small but increasing number of persons.

First, that nearly every case of active pulmonary tuberculosis in the adult *has a curable stage*.

Second, that to determine the presence of active tuberculosis in the early curable stage, the disease must be *suspected* by the patient's *feelings* and *history* and *not* by his appearance or some other evidence of advanced disease, such as hemorrhage.

Third, that the diagnosis must be made by a physician competent to make a diagnosis *in the early curable stage*.

Fourth, that the patient must accept the diagnosis even though he does not believe he is tuberculous merely because he does not look like an advanced case or have other foolproof evidence of consumption.

Fifth, that the doctor who has the patient in his care, after the diagnosis is made, is competent to carry the patient through to a *satisfactory conclusion*.

Sixth, that the patient will follow obediently and intelligently the doctor's orders.

Seventh, that doctor and patient will have a definite understanding, on the day of diagnosis, relative to the patient's financial condition; his

family's earning capacity, if any; his resources, and his necessary expenses.

Very frequently patients and families waste money ignorantly in useless and even harmful ways, especially in carrying out their desire to change climates. This is sometimes done with late-stage cases, contrary to the doctor's advice. Occasionally a doctor directs a patient, having very limited funds, to pursue a course that is entirely beyond his, or his family's, financial means to carry out. Both these evils are due to a lack of knowledge or to carelessness.

Poverty caused by tuberculosis is diminished as doctors feel more personal responsibility in preventing it. A physician who is as careful and conscientious about preventing invalidism in a tuberculous patient, as a surgeon is in preventing invalidism in a patient with a broken leg, will serve his clients well. He is not a fatalist, and he does not want a person to be a chronic invalid or die of tuberculosis to prove that his diagnoses was right. He is keenly alert to suspect the disease in its earliest stage. He knows that a large part of the tuberculous and their families have difficult financial problems, and he knows he must help them solve their problems and keep them self-supporting.

It is only in recent years that a definite feeling of responsibility for the welfare of the tuberculous and their families has come into physicians' minds. Prior to that time there was

pity, sorrow, fatalism, ignorance, and a desire to get rid of the patient by telling him to go to some other climate. But increased knowledge has brought increased responsibility. Many of the patients know, now, that they should not be hopeless invalids with nothing but a dreary existence before them. They, too, are thinking and speaking of responsibility; they, too, know where to place the responsibility. A storm of bitter criticism is gathering—indeed, it has broken in many places and physicians must seek shelter.

All doctors, regardless of the kind of medical work they do, should know the details of suspecting tuberculosis early; *this is a responsibility that cannot be avoided*. At this time a goodly number of doctors, and the number increases yearly in the cities, refuse to assume the responsibility of making a diagnosis of tuberculosis in its early curable stage. They know their limitations and frankly state them. They feel, and rightfully so, that their responsibility ceases when they suspect the disease, and advise the person suspected to go to a physician who does tuberculosis work for diagnosis and instruction relative to his after-care.

In studying the problem of tuberculosis and poverty for years I believe, that at this time, the responsibility rests upon laymen and doctors about equally. Twenty-five years ago the responsibility rested very largely upon the doctors; twenty-five years from now it will rest very

largely upon the lay people. Doctors can avoid responsibility—can pass the buck—more easily than the patients. The doctor's greatest responsibility in preventing poverty, is in suspecting the disease early and starting the patient on the right road to an early diagnosis and competent after-care. As to whether the patient accepts or rejects the diagnosis, wastes his money, or does anything else to bring himself and his family to a state of poverty, is largely beyond the doctor's power to prevent. As stated elsewhere, the doctor is not a policeman.

CHAPTER XII

REGRET OR HAPPINESS

No disease has caused so much regret as tuberculosis. The feeling is not limited to the patient and his family nor even to his lifetime. Some of the most gifted men and women in the Arts, Science, and Literature have been tuberculous. We regret their untimely death years after they are gone, and wish they had lived longer to continue the work that Nature had endowed them with such unusual ability to do. Interesting studies have been made and papers written on "Tuberculosis and Genius," and when one reads the long list of names of the great and near-great whose lives were cut short by this disease, he finds the intellectual and spiritual loss to the world quite as great as the material loss.

It might be of interest to bring to the reader's attention the inequality of the losses sustained by invalidism and death from tuberculosis and invalidism and death from diseases of the heart, the latter, at this time, being the leading cause of death in America. Adults, dying of heart disease, are usually past fifty years of age, and large numbers of them are past sixty. Many have accomplished their life's work and have

accumulated enough of this world's goods to live comfortably during their last illness. Persons with heart disease are not shunned socially; they are not a menace to the public welfare; they retain their earning capacity and usefulness, very often until they die. But with the tuberculous—how different! Largely a sickness of young adults, eighteen to twenty-eight being the years of greatest prevalence, the disease breaks into life at a time when its evil consequences are most deplorable. Students are forced to quit their school work; a trade or profession begun must be discontinued for a year, and often for all time; and many of its victims have accumulated insufficient money to meet their current needs. The romantic dreams of young men and women, of happy homes, children, and the realization of their carefully made plans, are suddenly changed by the disease. A new and unexpected trouble is encountered. If the disease is recognized early and intelligent, persistent effort made to deal with it, one may hope for recovery, and that other plans, and other dreams will take the place of those discarded. The gloomy, the dark side of the picture, need not be outlined in detail for it is known by all. It is only more forcibly brought to the mind of a physician who sees it daily.

Education of the Public.—A person learns useful information usually because of two reasons: First, as a child, he is compelled by

the civil law to learn a few simple things, the "three r's" being a good example of the result of compulsory attendance at public or private schools. Second, as an adult, he learns useful information because he wants to know what is useful or interesting to him. Public health teaching in the schools is a thing of very recent years and is poorly developed, but time and experience will improve its usefulness. At this time, if a grown person learns very much about tuberculosis, it will be because he wants to do so; it is not compulsory.

The present generation is not greatly interested in public health except as a topic of conversation. A person could learn enough about tuberculosis in one day to suspect the disease in himself or a member of his family, to have a general idea of its diagnosis and aftercare, and to prevent much of the invalidism, uselessness, and poverty that is caused by the disease; but very few persons take the trouble to do so until forced to do it, and then it is often too late to escape the penalty of ignorance. Every few days I hear someone say, "These lungers ought to be shut up so they wouldn't spit bugs on the street." Yet the same persons that want the open case consumptives isolated often rebel against paying the necessary taxes to afford comfortable living conditions for them. Wanting something done and paying money to have it done are very different things; wanting some-

thing done to eradicate tuberculosis for the general good of society is a thing of merit, although very indefinite. The problem will be solved only when every grown person knows what is necessary to protect himself and, incidentally, how to protect a small child from the evil effects of the disease.

Nearly every day I hear from patients and their families expressions of regret of this type: "I didn't even suspect I had it (tuberculosis)." "I didn't know it in time," "I wish I had known it long ago so that I could have got well." "The doctor didn't know it until it was too late." The question comes to every observing person: What evidence is there that a large part of the tuberculous public wants to know until too late? When one of these patients that regrets his deplorable state is asked what effort he has made to learn enough about tuberculosis to protect himself, he finds the patient has done nothing, and most of them appear not to know they have a personal duty in the matter. The blame is frequently laid on a doctor even though the doctor did not even see the patient until the disease was far advanced. But the experience of tuberculous persons with doctors is far, very far, from satisfactory in many cases.

Improved Medical Service.—One of the best evidences of improvement in tuberculosis work is found in the standards of the younger physicians. Many of them believe that their tuber-

culous patients should get well so that they will live useful, pleasant lives, and they make their plans and carry them out to accomplish this. They are mentally alert to suspect the disease early; if in doubt as to the diagnosis they do not hesitate to advise the patient to consult a doctor with more experience. They have a better understanding of the rest cure and how to order it to get the best results, and they are not controlled by fatalism as physicians were years ago. They do not make a practice of sending patients "out West" or elsewhere merely to get rid of them. Their success with tuberculous patients is a cause for happiness to older doctors who recall, with regret, their own early experiences, the poor work they did, and the poor results they got.

Plain Speaking.—Physicians in general may be divided into two classes; those who give the patient what he wants, and those who give him what he should have (Amberson). Very frequently patients say to me before the examination is made, "I want to know the truth." This is heard so often that one gets the impression that the public is deceived by doctors and that tuberculous persons are not told they have the disease. No greater injustice can be done to a tuberculous person than to keep him in ignorance of the truth, provided he is not actually on his deathbed. No physician likes to be disagreeable or to say disagreeable things, although both

are necessary in dealing with the tuberculous. No grown person with normal intelligence could or would take a rest cure and learn tuberculosis, without knowing he is tuberculous. The practice of telling tuberculous persons that they should rest up a little because they have "weak lungs," "are all run down," or "have a nervous breakdown" is usually only delaying the battle, making the rest cure longer and more expensive, and increasing the period of invalidism the patient will have, if he overcomes the disease. The fear of hurting the patient's feelings by telling him the truth is greatly overestimated. Being tuberculous and not knowing it in time is a silent tragedy. Hear frequently the pitiful regrets of the late-stage cases that were not diagnosed in time, and were not told the truth about their condition at the right time; it will make one a firm advocate of plain speaking.

A Doctor's Regrets.—It is not often that a doctor expresses regret to patients about their condition, although he has a feeling of regret for all of them. In his personal dealing with the tuberculous a doctor studiously avoids sentiment and fear; he deals with truth judiciously and hope, extensively. Nearly all doctors are greatly overrated; this is especially true of those who deal with patients having conditions or diseases about which there is much sentiment, emotion, or fear, and this includes tuberculosis doctors. With far greater frequency than is

commonly known, tuberculosis doctors are expected to do miracles or, at least, something akin to miracles. They are called to see patients for the first time that are but a few days from death,—patients that have been tuberculous for years,—and the family and patient expect that as a result of their calling some strange and miraculous recovery will take place. But it does not! The patient's history and experiences,—good, bad and worse,—as they have been recorded in part in this book, flash into the doctor's mind. The feelings of the family, especially their ill-founded hopes, are known to him. Externally the doctor is cheerful and to the patient, hopeful; in his own heart there is much regret.

Facing Disagreeable Facts.—Reason is said to be the latest developed and the highest faculty of the mind. In life there is often a conflict going on between reason and feeling. Children do not face disagreeable facts very well for they are controlled by feeling. Grown persons should be able to face disagreeable facts better than children for they are, or at least should be, controlled by reason. Much of the success or failure of a tuberculous person, provided he has had the advantage of an early diagnosis, depends upon whether he will face the facts like a grown person or act like a child. When first diagnosed his feelings control him. But soon, very soon, if he is to succeed, he must be con-

trolled by reason. Tuberculous persons that have been controlled by their feelings instead of by reason, and have failed as a consequence of it, often speak of the course *they should have pursued*, from the standpoint of reason when it is too late. Their feeling of regret is but an added sorrow to the other unpleasant experiences of their last days.

Poor Medical Service.—Most of us who are in trouble like to lay the blame for it upon somebody else if it is possible to do so. A large proportion—probably three-fourths of all adult tuberculous patients—hold a doctor or even several doctors partially or entirely blamable for their unhappy condition. The lay public has much to learn yet about doctors, medical knowledge, and competent medical service. Many persons still overestimate a doctor's ability to give an accurate, useful opinion on a medical problem, because they do not know the extent of medical knowledge at this time. They appear to think that learning medicine is about as easy as learning the multiplication table, the preamble to the Constitution, the Apostles' Creed, and the Lord's Prayer; and that anyone who calls himself "Doctor," even though but a few months before he was a plumber, bath-house rubber, or chauffeur, is qualified to give advice on any medical subject that may be placed before him. But the facts are very different as the experience of the patients shows.

There is a peculiar lack of discriminating judgment on the part of the public in knowing how to obtain good medical service, and their experience, complaints, and regrets prove it. A man may boast of his ability to buy good shoes, a good cigar, a good hat, a good motor car, good insurance, or good legal service, yet he will make a miserable failure in getting good medical service—a thing of far greater importance than the others mentioned. It is a very sensible procedure for the tuberculous, or for those who suspect tuberculosis in themselves or members of their families, to make inquiry of doctors about obtaining competent medical service. In every state the superintendent of the state tuberculosis sanatorium is usually well informed as to who is competent in the various parts of the state and, being a public servant, he will gladly advise anyone making an inquiry. It is far better that the patient and his family learn who is competent *first*; indiscriminate shopping around with incompetent medical service and quackery is one of the principal causes of regret among tuberculous patients and their families.

Wasting Money.—There are probably few diseases whose victims, both patients and their families, should watch their expense bills with greater care than is necessary in tuberculosis. This disease still leads all others in causing poverty. Loss of earning capacity while taking a rest cure, the actual money spent to obtain

the cure, and the frequent changing of occupation to a lighter one after recovery, cause many tuberculous persons and their families to be in bad financial condition, even with the very best management. But it is bad management, the useless waste of money, that causes the most regret in many cases. One sees the families of working people selling their homes to get money with which to send a late-stage consumptive "out West," hoping the climate will cause a miraculous cure. The patient dies, the body is sent back to the home for burial, the family's hard-earned money is wasted, and nothing good has been accomplished. Competent physicians warn the public over and over about wasting money on hopeless cases, but the family's sentiment is followed rather than the advice of the physician. This is another case where following sentiment leads to regret.

The Incomplete Cure.—It is very easy for a doctor to tell a patient that he must lie in bed all of the time, later part of the time, for months or years. It is easy to tell a patient that he gets well and stays well by the formation of good firm scars in the lungs that will not break down. All of this is easy—for the doctor! Not so easy, though, for the patient. If doctors knew a better way, they would use it; but they do not know a better way at this time.

Many persons who attempt to take the rest cure either at home or in a sanatorium start off

with good intentions. They do well for a few weeks and follow the rules carefully and intelligently; but after they begin to feel better, and there are other evidences of improvement, they begin to break the rules so that it is not long,—often only a few weeks or even a few days,—until they are quite away from the daily routine they started. They want to go back to work, go back to school, or go out to mix and mingle with their friends about as they did before they were diagnosed as tuberculous. Nature heals a few of these cases spontaneously; others sooner or later have a spread of the disease and begin the rest cure again, sometimes winning the battle, at other times losing it—at all times regretting that they did not continue the rest cure until safely healed when they first began it.

Looking Backward.—Every tuberculous patient, as soon as diagnosed, begins to study his personal health history, and the more he learns of the disease, the more he regrets things done or left undone since he became tuberculous. Regret or happiness will come into his mind daily. Because of regret one frequently hears two expressions: “If I had only known, etc., etc.” and “If I had done this or that, etc.” Much of the regret felt by the patient is avoidable and is due to his or somebody else’s ignorance of the disease and its proper care. To rid the public of ignorance of this subject, doctors teach individual patients, hold clinics, give lec-

tures, write technical papers and books on tuberculosis for other doctors, and write books in simple language for the layman's use. The battle with tuberculosis is largely a battle with ignorance of the disease; this is true both of the individual patient and for the public. Fortunate is the patient that is so well informed on the subject that he can look back without serious regret over the months and years since he became tuberculous.

Happiness in Suspecting Tuberculosis.—Looking for personal trouble or grief is not a characteristic of the normal healthy mind. The opposite is true; one tries to avoid trouble and usually dislikes to encounter it. But the sensible man follows no extreme course on either side. Good judgment tells him that he should know enough about the evidences of beginning tuberculosis to suspect it in himself, and his observation of the unfortunate experiences of many others that did not know how to suspect it, confirms his judgment. He has the forethought to become informed on the subject; he seeks light; he wants to fight no enemy in the dark. To him knowledge is happiness.

Early Diagnosis and Happiness.—To be diagnosed as tuberculous in any stage is cause for personal grief; to be diagnosed as tuberculous, when the disease is far advanced, is a tragedy. Happiness is largely a relative condition, a feeling that results from favorable comparison.

Most of us have a few troubles, but most of us are happy, too, because we have escaped many others more serious. A tuberculous person diagnosed in the early stage is at least happy because the diagnosis was made and accepted early. He knows that he has a good chance for recovery and this knowledge is a pleasure to him.

Happiness in Learning Tuberculosis.—Someone has wisely said, "It is better to know very little than to know many things wrong." Most tuberculous persons, when first diagnosed, know many things about the disease that are wrong. The self-satisfied person does not care to examine his knowledge to see whether it is right or wrong. The most sensible view to take is to learn all about the disease that one can. It is especially important that the patient know everything necessary for his own welfare, and, at least, for the protection of small children. A considerable number of my private patients read with great interest and profit the layman's books on tuberculosis that are available as well as the *Journal of the Outdoor Life*. It is to their advantage to do so and they are fully aware of the fact. Many well-informed tuberculous patients and their families are very thoughtful and very useful in preventing other patients, not so well informed, from doing things that would cause them irreparable injury.

Happiness While Recovering.—All normal, intelligent grown persons occasionally have dark

days—gloomy days! Life is not made up of one continuous round of joy to most of us who must meet its duties and difficulties year after year. The patient's life before becoming tuberculous is a fairly good index of what his life will be after he is diagnosed, that is, if he is diagnosed in the incipient stage of the disease. Most tuberculous patients are happy while taking the rest cure; many are happier than when at work; and few are less happy than they were before becoming tuberculous. The stormy petrels, the kickers, the knockers, the weepers, the wailers, so well known in the sanatorium have had all of these social and personal defects for years. They are found in all large groups, healthy or unhealthy.

While taking a rest cure is a good time to think, to have a mental house cleaning, to rid one's mind of a lot of foolish ideas that are only harmful, excess baggage. Nearly all patients have a far more sensible view of life when they again mingle with the world after the rest cure is finished. Responsibility sobers the normal mind; regularity in the daily routine has become habitual; sensible pleasures and pastimes have been substituted for others that might be injurious to the welfare of the patient. Not infrequently one hears the ex-patient say he is happier than he was before taking the rest cure.

The Decline of Fatalism.—Nearly all lay persons fifty years of age or over, living today, were taught by their parents and others that tuber-

culosis is a disease that always causes death. This belief was almost universal a century or more ago. With it came, naturally, the belief that when one was diagnosed as tuberculous, there was very little to do about it except to wait helplessly and hopelessly for the close of life to come. In America there were old wives' tales freely told about persons that had gone out West and had recovered, but fortunately—for the West, at least—most of the patients could not make the great adventure. Due largely, in America, to Trudeau's teaching the doctors began to learn and practice the rest cure treatment. This treatment, when carried out properly with patients diagnosed in the early stage, enabled the patients to recover and return to normal or practically normal, useful life. Fatalism could not continue under these conditions, for it was seen that tuberculosis is a curable disease and that many thousands of tuberculous patients recovered annually. Fortunate is the young tuberculous patient of today that does not have to battle with the malicious influence of fatalism as it was known many years ago.

The Conscience and Responsibility.—One of the greatest causes for happiness today is the improvement in the minds of physicians, themselves, relative to their personal responsibility toward the welfare of tuberculous patients. There is still much room for improvement, for old

physicians, like old lay persons, change their ideas slowly if they change at all, and many young doctors take up their professional work with a very hazy idea of tuberculosis, except as it appears in the late-stage case with germs in the sputum. However, the young doctor of today has far better ideas of tuberculosis and what should be done for a tuberculous patient than the graduate had twenty-five years ago. But to expect him to proceed in a business-like way to make a diagnosis of a difficult or questionable cases of lung tuberculosis is as irrational as to trust yourself to him for the removal of your appendix or your brain tumor (Allen Krause). The diagnosis of difficult or questionable cases of tuberculosis cannot and therefore should not be entrusted to a large portion of the entire medical profession any more than brain surgery should be, and the problem must be solved in some other way. On the other hand the entire medical profession should be able to *suspect* tuberculosis in the earliest stage; its diagnosis can be left to doctors who are specially qualified for that work. Every doctor will then have a clear conscience, he will have fulfilled his responsibility, and both doctor and patient will feel the problem was properly handled.

Passing the Buck.—This is an expression much used during and since the World War to indicate that one avoids or refuses to accept a

responsibility. In the army blunders, errors, ignorance, and stupidity that cause trouble must be explained to a Higher-Up. The explanation is not made with comfort, but usually with much discomfort for punishment of some kind is likely to follow. Army discipline teaches one to be cautious in accepting responsibility and no experienced soldier is "nosing 'round" looking for it. In civilian life conditions are very different; the ignorant and stupid often go blundering around assuming responsibility without thought of evil consequences to others, and without fear of punishment for themselves. Adverse criticism of the public and the individual conscience are restraining influences that cause one to avoid responsibility. Fortunate is the doctor or layman that knows when to pass the buck in dealing with tuberculous patients, for avoiding responsibility in difficult or obscure cases is likely to be a cause of happiness both to the doctor and to the patient.

Good Surroundings.—One might think by reading this book that tuberculous patients are surrounded by ignorance, superstition, evil advisers, poverty or economic hardship, and a score or more of other harmful influences, from the time the disease begins until the battle is finally won or lost. *Many of them are!* But a book is written to cover the entire subject and must exhibit the bad as well as the good points to be encountered, not by one patient and his

family and his medical attendant, but by many different patients living under many different conditions and with very different surroundings. It must plainly warn the reader against the ignorance and errors in judgment that have caused other patients irreparable injury and unending grief. Pleasantly or unpleasantly it must record the truth.

But there are other patients more fortunate or lucky. They know little of the sorrows and hardships caused by the disease except as they read or are told of them. These more fortunate patients have had good medical service from the beginning, they have good homes, intelligent families, sufficient money, and are surrounded by good influences that are a cause of joy. With them, the battle is easily and comfortably won and they are, or should be, happy.

The Reading Habit.—It is unfortunate that many persons have not formed the habit of reading. One meets large numbers of men and women who have had good educational advantages, that is, they are high school or even college graduates, who read nothing more than the headlines in the daily papers that have to do with crimes, scandal, and the various sports. At the beginning of the rest cure many patients should not read and will be told so by the attending physician. Later, when the disease has quieted down, reading is one of the very best time-killers. It is well to form the reading habit when

the doctor thinks it safe to begin it. Time will pass more quickly and more pleasantly, not only while taking the cure, but also in the years to come when the patient has ceased to be a patient and is carrying on some kind of useful work. Men and women who read attract others of their kind. A person with the reading habit leads a quiet life, and quietness of body and a peaceful mind, are very desirable assets for the tuberculous person that is trying intelligently to get well and stay well.

Periodic Reforming. — Unfortunate men, women, and children who need reforming and uplifting, as well as some of the reformers and uplifters, are always a problem to normal men and women. Both normal and abnormal persons become tuberculous, but the outlook is usually much better in patients that are normal enough to carry out the instruction given them so carefully that they do not need periodic reforming. Patients who confess that they should reform, and state that they are going to reform next week, next month, or after they do certain unnecessary and possibly harmful things, rarely succeed as do patients that need no reforming. It is not due to the disease that the patient needs reforming, for he is by nature and previous experience a "backslider," as the religious folk call it. He lacks stability and will not *stay put*! The reforming type of patient has periods of happiness, but because of his lack of balance,

is very likely to have periods of depression and regret frequently. The sensible patient will not leave the straight and narrow road that leads to recovery. Periodic reforming should have no place in the life of a tuberculous person.

Knowing Tuberculosis.—There are many diseases that patients need not study, such as pneumonia, measles, and appendicitis; there are other diseases about which the patient, himself, should have a thorough knowledge; among them one notes diabetes and tuberculosis. Tuberculous patients may recover without even knowing they are tuberculous; they may recover by following the instruction of a doctor and without studying the disease; but it is far better that a tuberculous person study the disease in order that he may recover more quickly, more thoroughly, and that he may avoid a future breakdown. Knowledge of the disease gives one a feeling of safety, and safety means happiness. A person who has been tuberculous and is well informed on the subject is not often worried about his future. He knows how to avoid trouble, he feels safe, and, as a consequence, is more likely to live a normal and happy life. Patients, taking a rest cure, should learn tuberculosis—learn it well! Traveling about in the dark is an unsafe way to get through life. Ask the patient that did not know and who failed as a consequence of it.

Forgetting It.—It is a common practice at this time for doctors and others to tell persons

with supposedly imaginary trouble to *forget it*. Such advice is dangerous to give and more dangerous, still, to follow. If the doctor knows *after thorough examination* that the patient is free of disease and that the trouble is all imaginary, it is safe and proper to tell the patient so. The great evil that is the result of the indiscriminate use of the expression—*forget it*—is that the patient often has at the time, not only a serious but actually a fatal disease, that the doctor has not discovered. Doctors like to have patients jest about their diseases both real and imaginary. A good lively sense of humor, the ability to see the funny side of life, is a blessing to the sick as to the well. Humor and good sense often go hand-in-hand; also morbidness and poor judgment are frequently found in the same person.

After a tuberculous patient has taken a rest cure and has gone back to work his mind begins to build up a barrier to exclude the disagreeable parts of the experience he has passed through. This is to be expected of the normal mind. Only morbid minds and chronic sympathy seekers continue to dwell on hardships, past or present. The healthy mind wants to forget disagreeable things and it is right and proper that it should. For this reason, one hears persons that have been tuberculous wilfully denying the fact after recovery from the disease. One observes, though, that these ex-patients follow the straight and narrow path and, should evidence of what

they think may be active disease reappear in them, they go at once to their medical attendant for another examination. It is commendable self-deception.

Doctors want to see their patients and ex-patients free of morbid thoughts and fears. After recovery it matters not to the doctor what the patient calls the disease he had. The doctor's chief desire is to have the patient returned to health and usefulness as quickly, as comfortably, and as cheaply as possible. When this has taken place the patient, as far as safety will permit, should forget it.

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